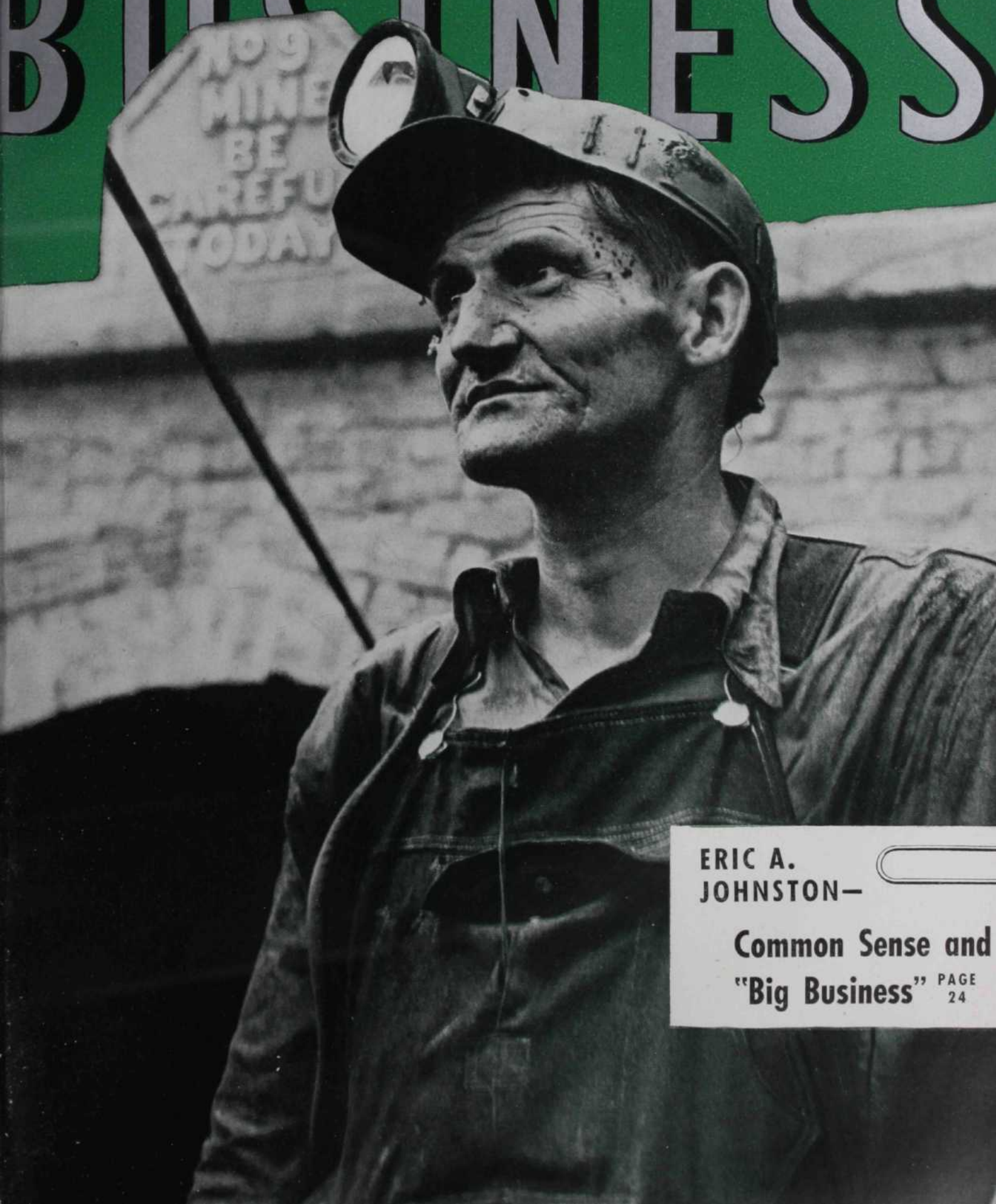


November

NATION'S

1943

BUSINESS



ERIC A.
JOHNSTON—

Common Sense and
"Big Business" PAGE 24

"I WILL COME HOME AGAIN..."

Out here, I hope . . .

Out here, I think . . .

Out here, I dream of peace—and coming home to showers and clean sheets and Christmas trees and my job . . . and the girl I love.

I will come home again . . .

But not until my brother's eyes no longer watch a red sun rising on Bataan. Not until men I've marched and eaten with no longer sleep beside forgotten beaches. Not while men who bled and died for me are unavenged.

No . . .

Not yet, before we strike down the enemy . . . and gut his ships and strip his guns, and break his will to hate and lust and kill.

No terms . . .

No paper peace put down by foes who, lacking guns, will still fight with pen and ink—can rob me of the victory I've bought with heart's blood and sweat and grief.

I'll come home again when this war's won. . .

I'll turn to the job I want to do, when I'm done with this job that *must* be done . . . and not before. I'll come home again, when I'm free of war and the restraints of war . . . when I'll be free to plan a future of my own

. . . free to build an even better America—an even better world—than the one I've always known. Free to work and be honored for my work in a land where there will always be for me and every man liberty, security and dignity . . . and the opportunity to set my pace and win my place according to my own ability.

That's what this war's about.

That's what Victory will be for.

That's what I want when I come home.

Night and day we're driving on to Victory . . . building 2,000 h.p. Pratt & Whitney engines for Navy Vought Corsair fighting planes . . . making intricate Hamilton Standard propellers for United Nations bombers . . . readying production lines to build Sikorsky helicopters for the Army Air Forces . . . producing other important items of ordnance. . .

For we believe there can be no peace without Victory . . . but we believe we can and must win this war soon . . . help bring our sons and brothers back again to their jobs and homes and even better futures than they had before. And, together, turn to peaceful things—to the building of an even finer Kelvinator, an even greater Nash.



The Army-Navy "E" awarded to Nash-Kelvinator Corp., Propeller Division.

NASH-KELVINATOR CORPORATION
Kenosha • Milwaukee • DETROIT • Grand Rapids • Lansing



NASH

AUTOMOBILES

KELVINATOR

REFRIGERATORS • ELECTRIC RANGES

Let's Get It Over With Quick!
Buy More War Bonds Now!



HILL DIVER

A typical example of B. F. Goodrich leadership in tires

THIS is a hill with a 90% grade! You'd probably never think of driving *your* car down its rubble-rutted slopes. But to our army men it's all in a day's work. Where *they* are fighting, in the Far North, the South Pacific, or the Mediterranean area, roads are often where you make them—down mountains, across ravines, over plowed fields, and through jungle growth.

It takes more than sheer nerve to travel such routes. Men and machines alike must undergo merciless jarring, jolting, lurching, and pounding. Tires are twisted and strained with forces pulling the rubber in all directions at one time. It makes driving over curbs seem like nothing at all! Yet

tires on army trucks just *can't* give up.

B. F. Goodrich makes tires for all types of army vehicles—special combat tires that don't go flat even when riddled by machine gun slugs, tires for gun carriages, scout cars, supply trucks, and "square tires"—endless band rubber track for multi-purpose half-track vehicles.

B. F. Goodrich also makes tires today for all essential civilian needs. Many of these B. F. Goodrich Silvertowns available to you are the same type tough, long-wearing rubber "hus-

kies" supplied to the army. Remember this when next you need tires for your trucks. Make Silvertowns your first choice for extra service and extra value. See your B. F. Goodrich Dealer first.





WE HAVE THIS TO SAY ABOUT Molybdenum

An electric personality, we'd say of molybdenum.

Not that Moly doesn't have many other good traits but right now her radiating features are especially bright against the widening horizon of electronics.

Such a personality interests us greatly from the point of view of a mutual world to conquer. The expanding possibilities for postwar electronics and electro-dynamics open before both molybdenum and aluminum.

Does this make the two metals bitter rivals for post-war markets?

Not at all. Each has a function with electricity in which it excels the other—the one transporting, the other transforming. Each metal, as it extends the applications of electricity, makes work for the other. Together they can create hundreds of new things and thereby millions of new jobs. This is true also in fields other than electrical.

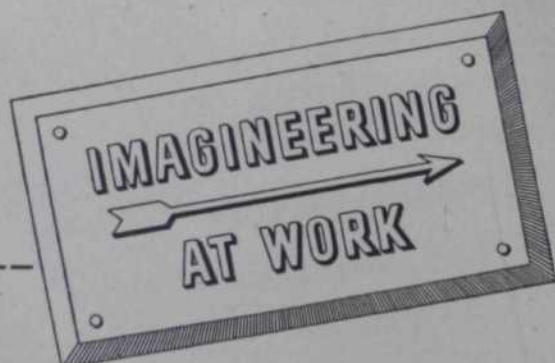
Every time you as an Imagineer devote an eighth day

of thought beyond the effort of war to figure out a new product to build, or a way to make an old product more salable by making it lighter or more resistant to corrosion or more appealing because of a lustrous colored finish, you have won a part of the peace-victory, without which the war-victory will be a catastrophic disillusionment.

And if you use an Alcoa Aluminum Alloy, as you certainly would, to obtain lightness with strength and resistance to corrosion, then in all probability your product will be cheaper than you think. For Alcoa has met the needs of war not only with tremendous production but also with lower prices, much lower, indeed.

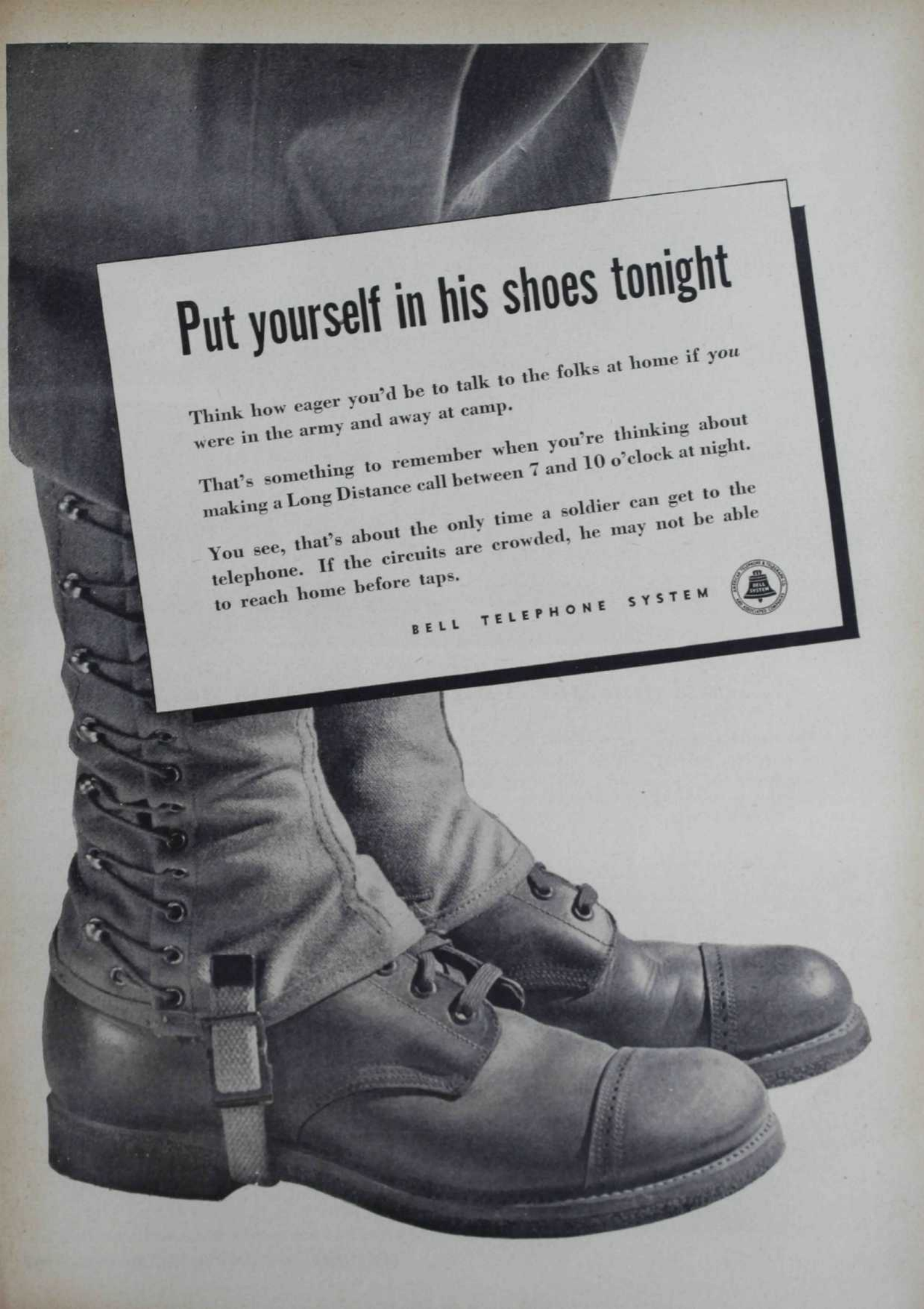
When more people can afford to buy your new product, more people will be employed to make it.

And that is a pattern for maintaining postwar employment. ALUMINUM COMPANY OF AMERICA, 2125 Gulf Building, Pittsburgh, Pennsylvania.



Alcoa Aluminum





Put yourself in his shoes tonight

Think how eager you'd be to talk to the folks at home if you were in the army and away at camp.

That's something to remember when you're thinking about making a Long Distance call between 7 and 10 o'clock at night.

You see, that's about the only time a soldier can get to the telephone. If the circuits are crowded, he may not be able to reach home before taps.

BELL TELEPHONE SYSTEM





CHAMBER OF COMMERCE OF THE UNITED STATES

VOL. 31

NOVEMBER, 1943

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MERLE THORPE—Editor and Publisher

LAWRENCE F. HURLEY—Asst. Editor & Publisher PAUL McCREA—Managing Editor
PAUL HODGES, ART BROWN—Associate Editors A. H. SYPPER—Asst. Managing Editor
LESTER DOUGLAS—Director of Art and Printing
Assistant Editors—HERBERT COREY, JOHN F. KELLEY, CHARLES A. R. DUNN
ORSON ANGELL—Advertising Director J. H. BUCKLEY—Western Advertising Manager
Circulation Managers—Eastern, DAVID V. STAHL; Western—FLOYD C. ZEIGLER

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As the official magazine of the Chamber of Commerce of the United States this publication carries authoritative notices and articles in regard to the activities of the Chamber; in all other respects the Chamber cannot be responsible for the contents thereof or for the opinions of writers.

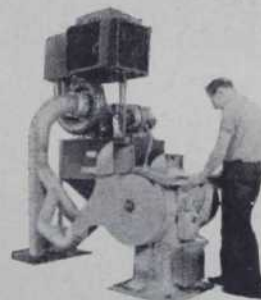
Although the editors will make every effort to return unsolicited manuscripts promptly and in good condition, Nation's Business cannot accept responsibility for loss or damage of this material.



Never Before has DUST CONTROL BEEN SO IMPORTANT

If maximum speed and efficiency are to be attained in America's accelerated production for all-out war, Dust Engineering is one of the first essentials in Production Planning. Today, AAF Atmospheric and Process Dust Control Equipment is protecting materials in process, increasing worker efficiency and reducing maintenance costs. If you have a troublesome or dangerous dust condition in your plant, write us.

Type D Roto-Clone with air filter after-cleaner for recirculating the cleaned air into the workroom. This type of equipment is especially suited to use on isolated or individual grinding stands where exhaust to the outside is impractical.



Collecting dust caused by cleaning magnesium castings presented a difficult problem which AAF engineers solved by precipitating the highly inflammable dust under liquid. Illustrated is a type N Roto-Clone booth-type grinding bench for magnesium grinding.

Send for "AAF in Industry", a new booklet describing the complete line of AAF equipment.



AMERICAN AIR FILTER CO., INC.

109 Central Ave., Louisville, Ky.

In Canada, Darling Bros., Ltd., Montreal



Covering the Water Front... Riding the Seven Seas!



From America's fastest fishing schooner to its mightiest dreadnoughts, seafaring men depend on York for mechanical cooling.

Aboard the famous Gertrude L. Thebaud of Gloucester, now serving with the Coast Guard, York refrigeration provides fresh food for alert and hungry men on submarine patrol.

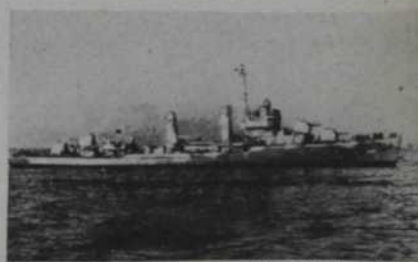
On 1,249 ships of the U.S. Navy... battleships, cruisers, aircraft carriers, destroyers, PT's, fighting ships and auxiliary ships of every type... York equipment preserves food, protects powder magazines, air conditions fire control centers, spotting rooms, aircraft carrier ready rooms.

U.S. submarines have wider cruising radius, higher speed, greater efficiency through York air conditioning. Steam engines, now building in the York shops will power the Navy's hard hitting new Destroyer-Escort vessels.

As this is written, York refrigeration is going to sea in 1,054 cargo vessels, including hundreds of the famous Liberty ships. And York equipment for an impressive number of the new and larger Victory Ships and for a whole fleet of refrigerated cargo ships is now in the making.

York Corporation, York, Pennsylvania.

BUY WAR BONDS AND STAMPS



Off. U. S. Navy Photos

YORK

REFRIGERATION AND AIR CONDITIONING FOR WAR

HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885

PROBLEM—
Make
Exhaust of
Diesel
Trains
Quiet



SOLUTION—

"Snubbers" prevent engine exhaust noise

Not so long ago, loud exhaust noise was one of the drawbacks in the use of Diesel power for passenger trains. That was before a method had been found to prevent the noise before it occurred. Now, high-speed suburban and commuter Diesel trains provide fast, economical service with unusual passenger comfort, including quiet surroundings.

Burgess acoustic engineers, seeking the cause of exhaust noise, discovered the now familiar "snubbing principle." They found that by properly smoothing the flow and breaking up the high pressure "slugs" of gas, which are characteristic of Diesel engines, exhaust noise can be completely prevented. The application of this principle resulted in the Burgess Exhaust Snubber which completely solves the loud exhaust noise problem of Diesel trains.

BURGESS PIONEERING in acoustic development has provided many other quieting devices to help in both war and peace. Over 20 years' experience has made it possible for the Acoustic Division to successfully design products ranging from acoustic telephone booths to ventilating duct linings. Why not write us of your noise difficulties? Acoustic Division engineers may have already worked out the solution to your problem.

BURGESS
Acoustic
DIVISION

Acoustic Division, Burgess Battery Co., 2817-P W. Roscoe St., Chicago 18

Through the Editor's *Specs*

Removing the whiskers

THE NAZIS have decided the need for euphemisms no longer exists in German-occupied Holland. They have just established a new agency in Amsterdam which bears the blunt title "Central Commission for the Closing of Commercial and Industrial Enterprises." It has 15 regional sub-commissions, which take their directives from Amsterdam.

During the period when the Nazis were trying to impress the Dutch with the goodness and mercy of their conquerors, the commission's duties probably would have been described as the "decentralization of industry," and the title might have been something like "The Greatest Good for the Greatest Number Commission." The Dutch, however, have been singularly unimpressed by Dr. Goebbels' semantics.

Replacing the replacers

FRIEND of ours came to Washington the other day to see his daughter, who joined the Wacs and was sent to the capital to replace a "desk soldier" who is now overseas. On the street our friend came across a middle-aged acquaintance in uniform.

"Why, Bill, I didn't know you were in the Army."

"Yep," said Bill, "I'm here to relieve a Wac who is being sent overseas."

An encouraging view

ONE OF THE soundest economists we know has just completed a confidential survey of the post-war employment outlook. He comes up with these conclusions:

After a reasonably brief period of readjustment after the war, the action of natural forces of supply and demand, under a free economy and a sound government, should be sufficient to keep all persons employed who are customarily in the "labor force" of the country. No "made work" should be required, and the estimate contemplates a drop of at least 2,000,000 in the number employed in the non-military federal government establishment.

A common error, says the economist, is the belief of many persons, including

some business men, that practically all persons now employed in war and non-war work will want to continue in the "labor force" when peace comes. The economist estimates that at least 10,000,000 persons now employed will drop out. This includes several millions of women and girls, large numbers of minors, and students, elderly people, physically handicapped and the like.

"Virtually all of these, or their equivalent in numbers, will inevitably tend to move out of the labor market when the war is over, provided we maintain our American standards and traditions."

Stumbling to victory?

ONLY HALF of us are capable of hard work, says Dr. Madge C. L. McGuinness, director of the department of physical therapy at Lenox Hill and Misericordia hospitals in New York. The other half, largely because of carelessness or self-indulgence, "stumble along as best they may."

Mebbe so, yet it's surprising the way some of our American "softies" have managed to "stumble" onto the beaches at Salerno, and through the South Pacific jungles, and across the barren rocks of the Aleutians. We know a good many business men, previously considered ripe candidates for old age retirement, who are working regular night shifts in war factories in addition to carrying on their business activities during the day.

We'll even bet that a lot of women who manage to keep their homes going while spending eight or ten hours a day over a lathe, couldn't make a punching bag say "uncle."

Jones still pays the freight

SINCE REPEAL of the 18th Amendment, the alcoholic beverage industry has paid into federal, state and local treasuries more than ten and a half billion dollars in 63 different kinds of taxes.

Although this sum represents taxes alone, it provides some idea of the staggering wealth that flowed into the pockets of criminals and racketeers during prohibition. Ten and a half billions is more than the total amount of new annual revenue sought by the Treasury,



Every day in every way— This Man Is Serving You

YOU may think of him only as an Erie man—one of the more than a million American railroad men engaged in keeping trains operating.

But see how his activities are reflected in your daily life.

Daily delivery by the mailman to your door is evidence that this Erie man is on the job getting trains through in all kinds of weather.

Your daily newspaper put on the front steps by your newsboy is made possible by the tons of newsprint, ink, and metal the railroad delivers to the publishers.

Those fresh vegetables, fruits, and other foods you get from your grocer are the results of shipments brought in from all parts of the country by railroads.

Bread from the local baker, milk delivered by your milkman, fuel from your fuel dealer, electricity and gas from your public utilities, even the furniture in your home—all these and many other things you enjoy can be traced back to the products, supplies, and materials brought to your community by the Erie and other American railroads.




And when war came, the defense of our country and the protection of our families rested heavily upon the ability of these railroads to rush men, munitions, and supplies where they were needed most.

Our war plants and war workers depend upon the railroads to deliver raw materials and rush finished equipment to the fighting front.

No wonder this Erie Railroad man is proud of his job—proud of the part he is playing in making the American way of life a symbol of hope to the rest of the world.

Nowhere in all the world is there better or cheaper transportation than the service given by American railroads. This is being proved in war and will continue to be proved in peace.



 **23,578** FREIGHT TRAINS DAILY
 **1,408,964** FREIGHT CARS DAILY
 **25,000,000** NET TONS DAILY

AMERICAN RAILROADS AT WAR

THE RAILROAD OF HELPFUL SERVICE

from all sources, in its tax recommendations now pending in Congress.

Among the Treasury's recommendations, incidentally, is a stiff new levy on liquor. "What liquor?" demanded a newspaper man who had been scouring Washington without finding a single bottle of whiskey on the shelves of liquor stores.

Andrew W. Mellon, as Secretary of the Treasury, used to remind Congress every once in a while of an inexorable law, not on the statute books—the "law of diminishing returns." The higher the taxes, the higher the prices; the higher the prices, the fewer the sales, and the fewer the sales, the less revenue in taxes.

More on Chargog—

THE VEXING matter of that lake in Massachusetts is up again. The one with the name like a string of box cars, beginning Chargogagogg and going on from there to infinity. From Mr. Edwin C. Kemp, American Consulate General at Halifax, Nova Scotia, comes this comment in a letter to the editor:

I was pleased to see the correction in your September issue of the spelling of Lake Chargog—etc., as I had noticed the grievous error in your August issue. Having been born near the lake itself, the matter has been of some curious interest for years, and somewhere the pronunciation of Cheegog—etc., has been acquired, but the point will not be argued.

Further, it has been reported, I do not know on what authority, that the name is the result of some early diplomatic negotiations between neighboring tribes of Indians differing in opinion as to their respective spheres of influence over the fishing rights.

Having come to an amicable settlement, they named the lake "Youfishonyoursidewefishonoursidenobodyfishinthemiddle," thereby establishing a noble precedent for peace in a world at war.

Thank you, Mr. Kemp, for your contribution. By the way, does your research show whether the Indians were called isolationists in those days?

That bore, history

"THE MORROW of the victory has more perils than its eve," wrote Giuseppe Mazzini, Italian patriot who formed an organization called "Young Italy" with a program for liberating Italy from both foreign and domestic tyranny and to promote its unification under a republican form of government. He finally urged Victor Emmanuel to head the movement for unity, and promised republican support.

This was 100 years ago. The past is still prologue.

The pinch begins

HEAVY new taxes are causing thousands of government employees in Washington to do some serious thinking about economy, balanced budgets, spending programs and the like. The jobs of great numbers of them have, in the past several years, depended upon continued lavish expenditure by the gov-

ernment. Nobody was called upon to pay the piper; the bill was simply added to the public debt, which we owed to ourselves, anyway, so why worry?

But the new taxes really hurt. Persons with fixed incomes are hit hardest. Washington is a city with fixed incomes. The other day a capital clothing store sent out letters to customers in an effort to discover why patronage had dropped off. The replies were illuminating. One example:

When the time comes to buy more—and this probably will not be before 1944 has passed into history—I expect taxes and living costs will still be high, so, when that time comes and I seek new clothes, or any other merchandise, my eyes will be peeled closer than ever to find the best possible return for my money. I shall not forget your store when that time comes.

If government workers will peel their eyes to government expenditures—the sole cause of high taxes—they may bring about replenishment of their wardrobes sooner than they expect.

Sotto voce oratory

A CHICAGO business man dropped into the office the other day to tell us about his insomnia. Seems he managed to put himself to sleep in good season, for a while, by whispering to himself what he would say if called upon to address his luncheon club. Trouble was, he got too good at it. His whispered oratory became so convincing and dramatic that now it keeps him awake. And the irony of it, he pointed out, is that he hasn't been asked to make even "a few remarks" since he became proficient.

An evil of bureaucracy

BAR ASSOCIATIONS, civic officials and others have long been vigilant to protect citizens against "ambulance chasing" and other petty rackets which usually involve a conspiracy between unscrupulous attorneys and the custodians of police department records. New opportunities for harassing business men arise from the multitude of new federal agencies which, by subpoena or otherwise, have access to the complete records of business firms.

A southern business man writes his senator that a lawyer who sued him must have obtained confidential information about the firm from a federal bureau which had just examined the firm's files. The lawyer subpoenaed sales tickets by dates, customers' names, delivery addresses and amounts, the business man reported, adding that the information could have come only from the federal agency's files.

"I think you should know something about these doings," the business man, who got a directed verdict in his favor from the courts, told his senator, "because they are contrary to the American principle of fair play."

Truth in advertising

BEFORE the statute of limitations becomes operative, the Federal Trade Commission should do something about



PURE WATER—more vital to health than oil to a machine

WORKERS in war plants—all of us subject to the tensions and strain of wartime—are more than ever dependent, for health and efficiency, on an abundant supply of pure running water.

Your community water works is probably rendering good service in spite of wartime shortages in materials and war-deferred plans for improvements and extensions. Vital as they are to public health, water works and sewage works construction, as well as stream pollution abatement, have been largely deferred for the duration. Projects amounting to upwards of a billion dollars are in abeyance.

An informed public will insist that these vital services be constructed or restored to full efficiency as soon as possible after the war's end.

* * *

We publish this message in the public interest since our product—cast iron pipe—is used almost wholly in the public service. More than 95 per cent of this country's water mains are cast iron pipe which serves for more than a century.

NO. 1 TAX SAVER



Pipe bearing the above mark is cast iron pipe. Made in sizes from 1 1/4 to 84 inches.

CAST IRON PIPE

RESEARCH ASSOCIATION, CHICAGO

Send your Christmas Gifts before ...

DEC. 10TH

Because of the limited equipment and the heavy burden placed on all transportation services, the Office of Defense Transportation is urgently requesting you to ship your gifts and packages before December 10th.

Help us keep the vital transportation lines of the nation flowing smoothly over the Christmas period by shipping before December 10th.



NATION-WIDE RAIL-AIR SERVICE

the Treasury's published release headed "Do you know about your September 15 Income Tax Declaration?" The release included this question and answer:

"Q. How complicated a job is it to fill out my September 15 Declaration?

"A. It is not complicated at all. You can figure out your estimate and write out your Declaration form in ten minutes or less."

The Treasury's statement, protests Dr. Harley L. Lutz, professor of public finance at Princeton, "reeks with unwarranted optimism," and he adds that perhaps due allowance should be made for "the exaggerations natural to salesmanship." For a good many years the Federal Trade Commission has taken a dim view of alleged "exaggerations natural to salesmanship," and maybe it should take a look at this one.

American resourcefulness

A PERMANENT resident of Washington found a furnished house a couple of weeks ago for a friend who was moving his family to the capital.

"How did you do it, in that dizzy overcrowded town," queried the friend.

"I just asked my milkman. He knows when families are going to move, and has built up quite a little real estate business on the side."

C'est la guerre, again

A LARGE eastern department store has found an effective method for easing its shortage of clerks and at the same time tempering the impatience of its customers at delays in service. It is sending out notices with its monthly bills entitled "Entreaty of 1943," inviting its customers to come in or send their friends in "to talk over things that you or they may do to help in our store-keeping."

Meteorologically, the store tells its customers that "there's an infectious undercurrent of excitement in our business which soon draws you into the nimbus of a home-front 'morale builder'."

There's an "undercurrent of excitement," all right, in a great many stores these days, as harried clerks, many of them inexperienced, attempt to serve customers who line up at counters three and four deep.

They keep us posted

NOTHING keeps us in closer touch with the relationship between government and business, than the copies business men often send us of correspondence with Washington officials.

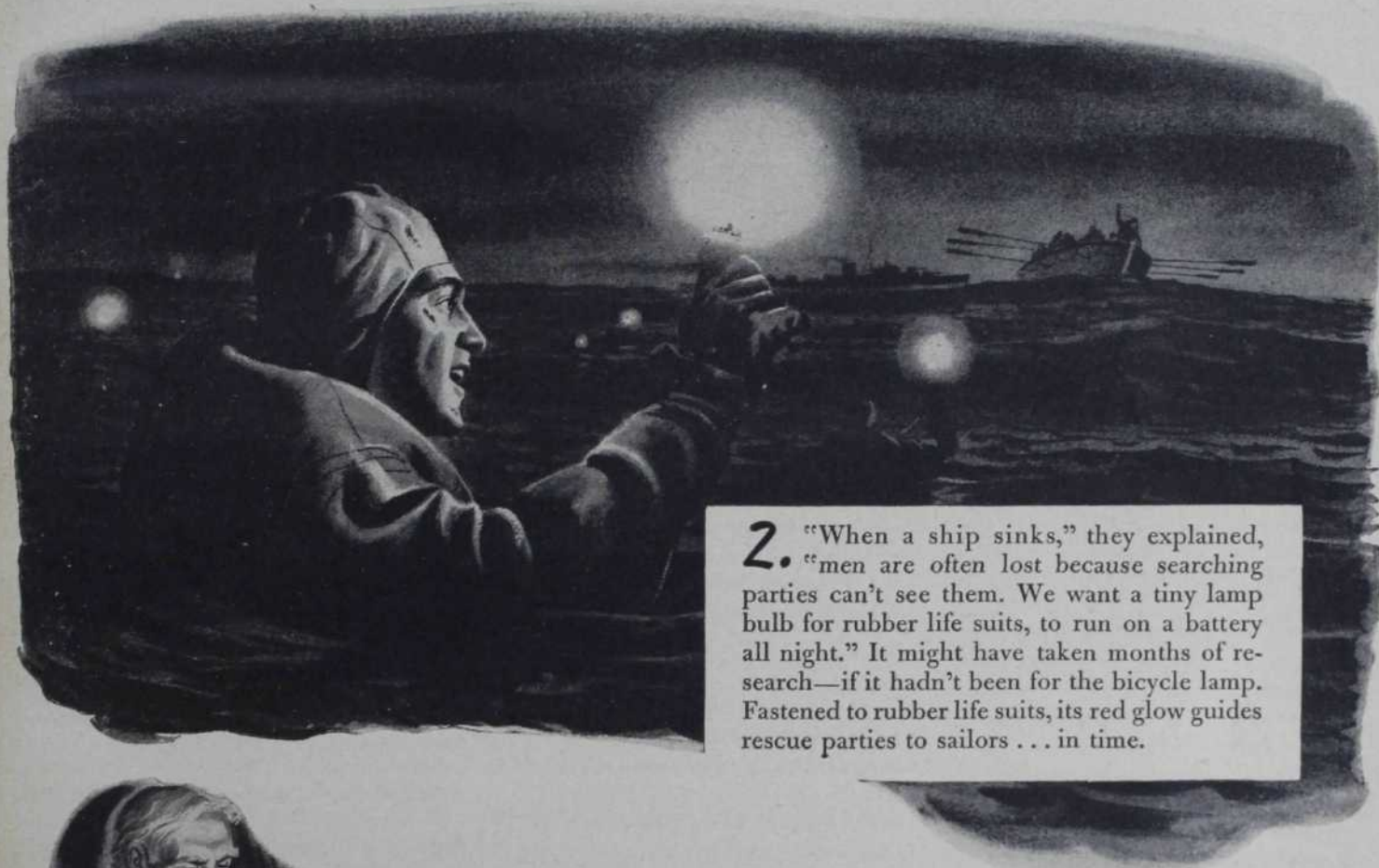
The letters throw a penetrating light into many dark corners. They tell us how legislation which Congress necessarily expresses in rather general, broad terms, is interpreted in the field by government agencies. They point out the handicaps of many governmental policies when applied to practical business. They give us a measure of how truly their representatives really represent.

Thanks to our friends and subscribers,



The Bicycle Lamp that went to Sea!

1. When G-E engineers designed a bicycle tail lamp years ago, they never figured this same lamp would some day save lives at sea. All they wanted was a small rugged lamp that would last a long time and burn very little current, so kids wouldn't have to be always buying new batteries. Then the Coast Guard came to us with a problem...



2. "When a ship sinks," they explained, "men are often lost because searching parties can't see them. We want a tiny lamp bulb for rubber life suits, to run on a battery all night." It might have taken months of research—if it hadn't been for the bicycle lamp. Fastened to rubber life suits, its red glow guides rescue parties to sailors... in time.



3. Time and again General Electric has supplied critically needed lamps overnight, by tapping the storehouse of lamps and lighting knowledge amassed since Edison's first lamp in 1879. Year after year it has been the goal of G-E research to make lamps that *stay brighter longer!*

THE BEST INVESTMENT IN THE WORLD IS IN THIS COUNTRY'S FUTURE...BUY WAR BONDS

G-E MAZDA LAMPS
GENERAL  ELECTRIC

**MADE TO STAY
BRIGHTER LONGER**



Hear the General Electric radio programs: "The Hour of Charm" Sunday 10 p. m. EWT, NBC; "The World Today" news every weekday, 6:45 p. m. EWT, CBS.



Negotiating FINANCIAL HURDLES

The difficulties that ordinarily attend the financing of industrial enterprises on any large scale, are multiplied by abnormal war-time hazards.

Your own business, like thousands of others, may be operating on a stepped-up basis which is straining your capital beyond the limit of effectiveness. Or perhaps, in holding down production to your capital capacity, you must forego many opportunities for additional profit.

In either case, our COMMERCIAL FINANCING DIVISION is at your service to analyze your requirements and provide the funds you need, without any interference with, or restrictions on your management.

We are assisting many new clients

today in a variety of situations. For instance, we assist in financing the purchase of a business, or if working capital is needed, we will make advances against receivables, inventory or machinery.

LIMITED LOSS LIABILITY

Some clients obtain working cash by anticipating collections. Our Limited Liability contract eliminates the risk of serious loss through the failure of their debtors to meet obligations.

The advantages in COMMERCIAL CREDIT financing service are worth your investigation now. An executive will be glad to explain them either through correspondence or personal interview, at your convenience.

Commercial Credit Company Baltimore

Subsidiaries: New York Chicago San Francisco Los Angeles Portland, Ore.

CAPITAL AND SURPLUS MORE THAN \$68,000,000

we have a little Gallup poll which is practically continuous. Incidentally, we might pass along a tip to the gentlemen on Capitol Hill: you'd be surprised how far away a business man can spot, and accurately appraise, the most subtle form letter, especially of the "I-think-I'll-duck-this-one" variety.

Quotable quotes

YOU CAN call "compulsory savings" a "refundable tax" or a "refundable tax" can be called "compulsory savings," but the character of the proposal is not changed thereby; the possessor of a brain small in quantity and addled in quality is still a moron with his hat on backwards.—Wall Street Journal.

Taxes could be a lot worse. Suppose we had to pay on what we *think* we're worth.—The Plan.

Everywhere we encounter a reluctance to take risks. Everywhere we find a strong belief in private ownership, and everywhere we see a scarcity of persons willing to become owners when risk is apparent. The demand for security is not confined to the disinherited.

—Edward Everett Chase
President, New England Council

We think of everything

BETTER hold everything before playing Santa Claus this year until you are sure about the federal rules and regulations. It appears that generosity can land the business man in jail or subject him to an order closing up his business.

A baker, we are advised by F.F.D.A., can't give away a box of cookies, a fruit cake or other bakery product without exposing himself to severe penalties. He can buy a box of candy, and give that away, or he can sell the candy-maker a fruit cake for the candy-maker to give as a Christmas present, but the baker can't present his customers and friends with Christmas gifts which come from his own shop.

Quick, Alice, the Looking Glass!

Notes on South America

THE OWNER of one of the biggest retail establishments in the country, in South America on war work, writes that in the retail stores he has visited down there, goods are bought, but seldom sold.

Intensive selling is quite unknown in that part of the world, he reports, and there is great opportunity for alert American retailers to do business in South America. Shops are small and highly supplied, and while such things as suits and shoes are made to order at reasonable prices, the time lag, he tells us, is "unbelievable—they take months where we take days."

Our friend adds, however, that any American retailer with ambitions to do business down South America way must be prepared to live and stay there, keep his money there and use native employees. Store officials employed in South America should by all means be given a year or two of advanced training in American methods, he says.

war goods
WHEN BETTER AUTOMOBILES ARE BUILT
BUICK WILL BUILD THEM



LIFE, LIBERATORS AND PURSUIT OF THE AXIS

TAKE a gang of young Americans — alert, eager, vital — Train 'em, groom 'em, wrap 'em in flying clothes and give 'em a big B-24 Liberator to fly —

Brief a target for them someplace where the Japs are thick, or where enemy factories cluster, ripe for the fall of a big stick of bombs —

Take all that, lump it together, and you've got the big purpose for which tens of thousands of workers in quiet Flint and suburban Melrose Park are working night and day.

Buick men, schooled and traditioned in doing things the good way, who in the past year or so have learned to do things even better than before.

Forgemen, machinists, lathe men, engineers, metallurgists, production wizards — all of them joined

together now in just one real aim: To come closer and ever closer to absolute perfection in the making of a mechanical thing.

What they make are the Pratt & Whitney engines that are original equipment on the Liberator.

What they make them with are the finest of materials, the best and latest of machinery, the fine, patient, insistent skill of people good at their jobs and proud of it.

Some day they won't be building

Keep America Strong
Buy War Bonds



war goods any more. They'll be back instead producing things to make life sweeter, liberty more meaningful, the pursuit of happiness easier.

But they're not thinking about that — yet. They've got a job to do for those guys swathed in flying suits whose work it is to drop the bombs that pave the way for Victory Day.

It's their biggest job ever, and they're making it their best. They want the crew to know, whenever they see a Buick name plate on their Liberator engine, that they've got something good to help 'em do their work!

The Army-Navy "E" proudly flies over Buick plants in both Flint, Mich., and Melrose Park, Ill., having been awarded to Buick people for outstanding performance in the production of war goods.



Buick powers the Liberator

BUICK DIVISION OF GENERAL MOTORS

Every Sunday Afternoon — GENERAL MOTORS SYMPHONY OF THE AIR — NBC Network

Multilith gets it from factory to fighter... **FASTER**



Remember moving day with all the worry and confusion of moving a single van load of household goods 'round the corner? Imagine what a colossal moving job Uncle Sam faces every day—thousands upon thousands of articles—all varieties, shapes and sizes—to be gathered into vast depots and then sped to fighting men scattered all over the world.

Think of the coordinating, timing, and record-keeping involved. One detail alone—the shipping documents that must accompany each shipment, customarily required writing up and running copies of ten different forms.

Working with U.S. Quartermaster Corps and Army Service Forces, Multigraph* men developed a method of using pre-printed master sheets called Systemats*. The Systemat carries "con-

stant" data so that only variable transportation information need be written in by hand or typewriter. Then the Systemats are put on a Multilith* machine to automatically reproduce the many accurate and permanent copies that are needed.

By this method a single document replaced the 10 forms formerly used. Time is saved, manpower released, errors eliminated, identification of items made easy, and supplies get to our fighting men more quickly.

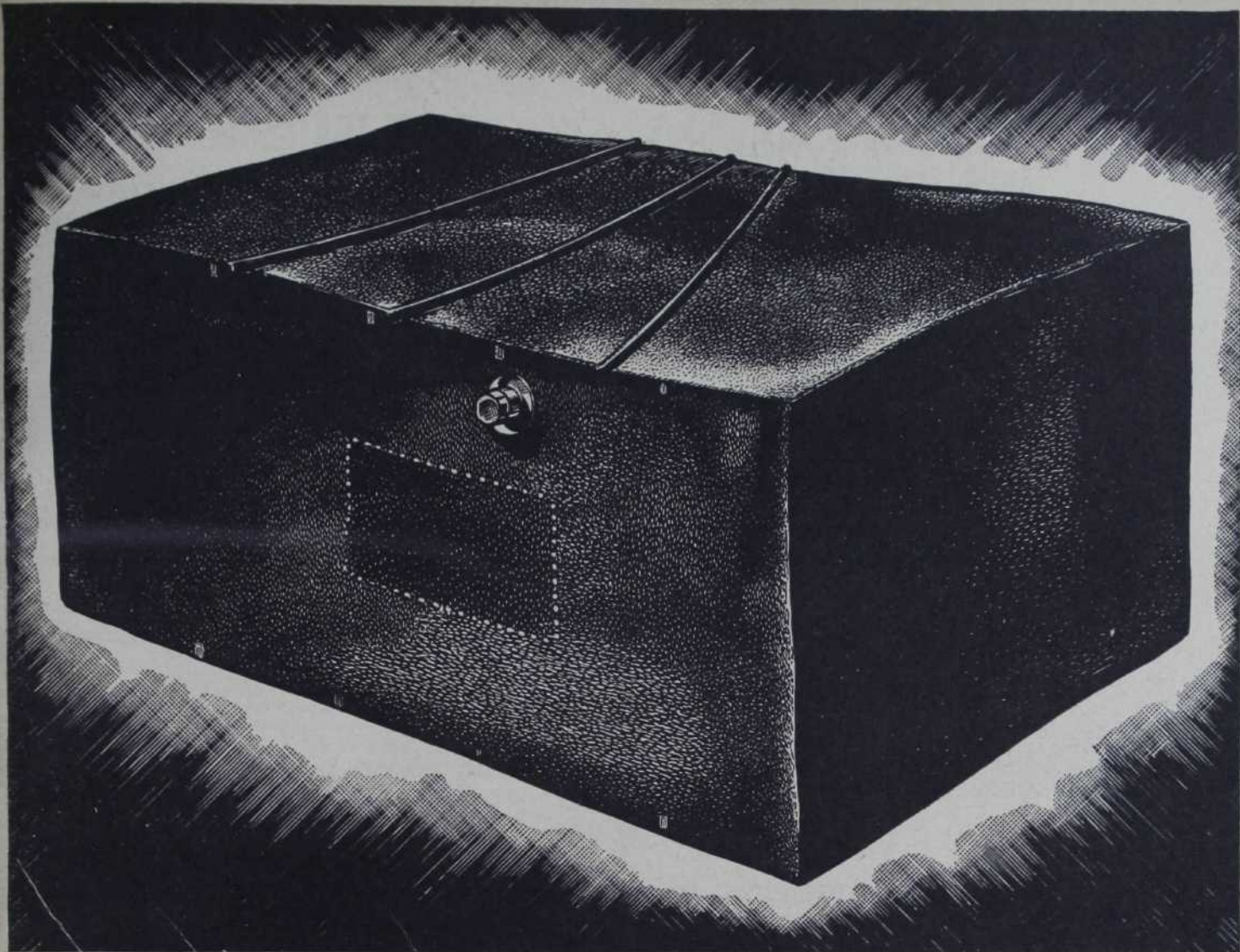
Multilith Systemats are being used in innumerable new ways to streamline paper work of war. Systemat is a word new to American business and industry. Remember it! Systemats can save time, money, and manpower in every department from factory tool room right up to president's office. Let us show you. Write Addressograph-Multigraph Corporation, Cleveland—and in principal cities of the world.

*T. M. Reg. U. S. Pat. Off.

Multigraph

TRADE-MARK REG. U.S. PAT. OFF.

SIMPLIFIED BUSINESS METHODS



THE *PADDED CELL* THAT'S DRIVING NAZIS CRAZY

YOU'RE LOOKING at a self-sealing fuel cell...the type that's lodged in the wings of our hard-hitting combat planes.

These gasoline containers—lined with several layers of natural and synthetic rubber—are the despair of enemy fighters. When pierced by a bullet, the chemical reaction of gasoline to the natural rubber sealant causes them to seal and heal on the spot.

Important to the construction of the self-sealing cell is its outer layer, or retainer. It is made of *rayon* impregnated with rubber...the same *rayon* that is used in the cords of the plane's tires. The primary purpose of the

retainer is to lend strength and protection to the cell as a whole—*rayon* was chosen because of its proven qualities of toughness and durability.

That *rayon* has acquitted itself well in this important assignment is attested to by the fact that it is now being used in standard Army Air Force-approved construction of self-sealing fuel cells.

This is but another highlight of the important war role that *rayon* is playing on every front. And it is but further evidence of the importance of continuous research...the kind of research that the American Viscose Corporation has dedicated itself to for the future of America.



Reg. U. S. Pat. Off.

AMERICAN VISCOSE CORPORATION

Producer of CROWN Rayon Yarns and Staple Fibers*

Sales Offices: New York 1, N. Y.; Charlotte, N. C.; Providence, R. I.; Philadelphia, Pa.

★ BUY UNITED STATES WAR BONDS AND STAMPS ★

Copr. 1943—American Viscose Corp.

They're Not Amphibious, but... **TRUCK-TRAILERS** **HELPED GET OUR MEN ASHORE ON GUADALCANAL**



TRAILERS HELPED with the landings on Guadalcanal, Attu, Casablanca, Sicily. Here's how:

Navy landing boats and tank lighters are powered with Gray Marine Diesel engines. A lot of engines have been needed . . . fast! Production at the Gray plant has been stepped up and up. Top efficiency is a "must." And transportation is one of the important operations.

So, Gray officials chose Fruehauf Trailers for transporting the 3,000-pound engines from factory to shipping plant . . . because they do the work better than trucks alone.

For one thing, each of the three Fruehaufs carries six engines per trip . . . the trucks carried only three. But here's the big point: *One power unit pulls the three Trailers* . . . because they are operated in a shuttle system! While one Trailer is

being loaded and the second unloaded, the truck is en route with the third. Truck and driver are never idle, whereas loading and unloading previously wasted half of each driver's and truck's working hours.

Major interest of Gray officials these days is delivering engines to the Navy fast . . . cutting costs is secondary. But their Trailers carry twice as big loads as did the trucks . . . and savings in gasoline, tires and manpower are inevitable when one power unit does the work of several.

When a shuttle operation is possible, Truck-Trailer economy is usually at its peak . . . but thousands of Fruehauf users, confronted with almost every possible kind of hauling problem, have found that Trailers do their jobs better, and save money too.

BASH THE BARRIERS! A motor transport operator has a regular run between Los Angeles and Denver, requiring six truck-and-trailer units. Although each vehicle goes through each of six States only one day in four, each must carry the license plates of all six.

This type of trade barrier, duplicated throughout the country—the taxing of interstate vehicles the same amount as intrastate vehicles, regardless of the use they make of the highways—is a critical burden. The solution? License reciprocity between States!



FRUEHAUF Trailers

"ENGINEERED TRANSPORTATION"—Reg. U. S. Pat. Off.



BACK
The Attack!
BUY
War Bonds!

World's Largest Builders
of Truck-Trailers

FRUEHAUF TRAILER COMPANY, DETROIT

Service in
All Principal Cities

NATION'S BUSINESS for November, 1943

MANAGEMENT'S

Washington LETTER

A last minute roundup by a staff of Washington observers of government and business

THE U. S. MAY HAVE PASSED THE PEAK OF its Santa Claus period.

There's a new note of economy creeping through Washington thinking.

It is noticeable in the executive branch, as well as on Capitol Hill.

Less extravagance, less giving away, less accent on world-wide social aims ...these things MAY result.

Men in close touch with high administrative circles say they will.

Sudden changes may be attributed directly to the highly critical reports brought home by the five globe-circling Senators.

While these observers found little not already known to official Washington, their reports to the Senate, to the nation, serve to spotlight glaring weakness in U. S. international policy.

Another Senator spent two months on an unofficial tour of South America, is preparing a 75-page report blasting the Administration's extravagance in that hemisphere.

Reports of wastefulness, of being outplayed, outsmarted in international poker, will not go down well with a home population living on restricted rations.

In an election year, these reports may well be expected to bring legislative and executive action.

► Administration-sponsored world relief and rehabilitation plans also will get a critical reception in Congress.

There will be no real attempt to block them, but conditions will be imposed on their execution.

The program—which will have far-reaching effect on many lines of postwar business—will be launched amid fanfare in Washington this month.

Forty friendly nations have been in-

vited to sign up in the huge program.

This ceremony will be followed by conferences in Atlantic City on details of carrying out the plans.

But these cannot be activated until Congress appropriates the cash, for the U. S. is cast as the world's major bread basket and supply depot.

Strong forces on Capitol Hill will insist that relief and rehabilitation in foreign lands be taken out of social uplifters' hands.

They contend it should be handled instead by men experienced in foreign trade, men capable of establishing foundations for postwar foreign commerce.

Other nations already are at work along these lines, members of Congress point out, and will preempt many of these fields unless we act.

Establishment of such channels is vitally necessary to provide outlets for surplus U. S. production after the war, they add.

► Often asked question:

How does it happen that Senators tour war fronts, bring home critical reports that make news, that haven't been heard before?

Answer is that newsmen in war zones are bound by censorship rules, military and civilian.

And under these rules, criticism might interfere with the war effort.

Even when they visit home, reporters must express critical views with caution—if they hope to return to foreign assignments, which they can do only with military approval.

Service men are subject to the wrath of their superiors, and certainly civil representatives of the Government make no public criticism of the Administration they represent.

All of which leaves few persons other than members of Congress able to reach war zones, able to say what they think of what they see.

► Watch for gradual easing of heretofore "critically" short metals into civilian channels.

Fact is, those in touch with inner councils say, manpower will determine size of the flow.

Most metals, they add, are NOT short.

Aluminum, copper, zinc production have caught up with and passed current war needs, these authorities say. Some metals pour into growing stockpiles.

Many are due for a shift from the "critical" list.

Unofficial reports from WPB say steel will be allocated for washing machines, a long list of other household equipment, in 1944's first quarter.

But quantities of each item will be small.

Some WPB officials urge gradual resumption of normal industries to cushion war-end terminations. Such resumption would be slow, small scale.

Opponents of the gradual return policy say it would disrupt war industries by attracting workers now seeking lasting, peacetime jobs.

Army, Navy denials of overbuying, overstocking, make less impression since they discovered they could withdraw abruptly from the butter market, live off their shelves for six months.

► Capitol cloakroom odds on adoption of a federal sales tax: 50-50.

It is what the President calls an "iffy" question.

IF Treasury insists on \$10,500,000,000 more revenue in 1944—and gets it—half the total will come from a sales tax.

IF Treasury will settle for not much more than half its present demands, no sales tax.

That's the way expert observers see it.

Although the possibility of strong political repercussions from sales taxes are greatly overrated, both Congress and Administration fear them.

Twenty-three states have adopted sales taxes. None has brought serious political upsets traceable directly to the levy.

Some members of Congress already plan to make political hay if the issue reaches the floor.

Their efforts would take the form of florid speeches against "purposely raising the cost of living...."

There's a good chance the President would veto a sales tax, depend on deficit financing through next year's election.

Note the significant unanimity of opinion on Capitol Hill against the Morgenthau tax program.

Many members of Congress, some openly, some privately, are doubly critical because they see continued administration effort to advance social-political aims in tax legisla-

tion whose sole purpose should be to finance the war.

They are angered by Administration's attempt to excuse 9,000,000 wage earners from all federal income tax, to shift this load to higher brackets.

Opposition is by no means confined to Republicans. Many Democrats share it.

Practically no defense of the Treasury proposals was offered by even the most ardent administration supporters.

► Americans will do more work if they're asked, less if they're told.

So his advisers tell War Manpower Chairman McNutt. That's why he isn't pressing for compulsory manpower controls.

It's also why sentiment for national service legislation, strong a month or so ago, fades fast.

► Businessmen looking over foreign market prospects needn't worry about where South Americans will get the money for postwar trade.

They're getting it now—from us.

South American foreign exchange reserves were \$775,000,000 in 1940.

At the present rate of rise they will pass the \$2,000,000,000 mark in mid-1944, and hit \$2,500,000,000 if war runs through 1945.

Increase results from wartime trade—we are buying so much from South America, in both goods and services, for cash, and selling so little.

Much of what we do send south is lend-lease.

► Modification of WPB's order restricting building to essential war structures is expected soon.

Construction men predict relaxation to allow more maintenance, more repair work, but no general letting down of the bars. Materials still are too scarce for that.

Unemployment among building trades (estimate: 300,000) continues upward, despite overall manpower shortage, as war construction tapers off.

Many building mechanics are too old to shift into war work, industry leaders say.

Because none were trained during depression years, average age of skilled men went up, they point out.

These men, nearing retirement, avoid crowded war production centers.

► Organized labor's omission of unqualified endorsement of F. D. R. for a

fourth term at annual conventions means little—at this time.

Political dopesters say it's too early for labor to commit itself. Commitment a year in advance would be poor bargaining technique.

Unions are bargaining for all the advantages, all the promises, all the seats at conference tables they can get.

Endorsements will not come until the bargains are made. That will be shortly before elections.

► Life insurance interests will propose plans for private companies to take over the Government's war risk life policies.

At present government-owned and operated National Service Life has in force a total of \$80,000,000,000 on the lives of service personnel.

This is approximately 60 per cent of all the life insurance in force in the U. S.

Insurance men point out that of the peak of \$40,000,000,000 of government-held life in force during World War I, only \$2,000,000,000 remain in force today.

This, they contend, is because Government has never followed up, serviced its policies.

Servicing, they hold, done more cheaply, more effectively, by private companies, would keep more of this war's insurance in force after the war, make it a better investment for service people.

► Utility men sounding out government planning on postwar use of huge, depression-built public power projects foresee little peace for themselves.

War has produced a ready outlet for these power plants, but present markets will be sharply reduced by war's end.

Government plans, as yet tentative, unofficial, call for continued production of war-essential metals, building public stockpiles, chiefly to provide a continued outlet for public power.

But this offers only a temporary power market.

Government ownership advocates argue that the investment in public power must be protected, that only the sale of power can protect it, so markets must be found to keep it busy.

This may lead into private industry's

manufacturing, processing fields.

It also is likely that government will buy up privately-owned power distribution systems to provide lasting markets for public power.

Same argument, private utilities point out, may be applied to the Government's \$25,000,000,000 worth of war plants, which reach into scores of private industrial lines.

► Don't overlook the importance of Controller General Warren's letter to Senator Murray on war contract termination settlement.

He challenges War (or other) Department's right to make final settlements before review by the General Accounting Office.

Mr. Warren says, in effect, that as the Government's auditor he is legally responsible for establishing the accuracy of claims against the Government, and he intends to determine the accuracy of claims through his own office.

Most businessmen agree that months, perhaps even years, of delay will result if GAO reviews all claims before payment.

TOO LATE TO CLASSIFY: Big problem: How to get government-owned machinery and equipment out of postwar production's way. There aren't enough warehouses in the U. S. to hold it, industrialists say....Secretary Ickes is "ruining" Puerto Rico's competitive food merchandising industry through his control over imports, the island's Chamber of Commerce charges....Wall Street Journal discovers the common cold is a \$100,000,000 business. U. S. citizens will spend that much for sniffle remedies this year...."Schedule your work for a long Pacific war," generals tell industry. "We can now look forward to the certainty of Japan's unconditional surrender in the not distant future," Vice President Wallace tells the world....A single armored division uses more than 600 tons of ammunition every day it is in action....Tom M. Girdler, Vultee Aircraft board chairman, says the aviation industry could meet its present pay rolls for only two weeks if war contracts were cancelled suddenly....Arthur Whiteside, civilian requirements director, preaches privately that price and ration controls should be continued for three years after war. ...Industry is producing a .45 caliber gun that fires 450 bullets a minute, at a cost of less than \$20 per weapon. ...Seed men are getting ready to supply 22,000,000 Victory gardeners in 1944.



YOUR PERSONNEL PROBLEMS WILL BE SIMPLIFIED BY AN

Appropriate Employee Pension Plan

Improved management-employee relations are a natural consequence of a correctly designed employee pension plan. These are the basic benefits *your* firm could obtain from such a plan soundly financed through investment in insurance company annuity contracts or in securities:

1. Reduces labor turnover. By its nature, a pension plan rewards long, faithful service.
2. Attracts and holds high type employees. The employee is afforded benefits supplemental to

Social Security payments which are based only on earnings up to \$3000.

3. Eases Wage Problems. A pension plan provides positive financial value to the employee, yet is in line with governmental anti-inflation trends.

A 92-page summary of the fundamentals of formulating and financing pension plans is now available. There is no obligation entailed in writing for this study, so send for your copy now and have the facts available when you *need* them.

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NEW YORK 15

Freedom Is Not Free

STUDENTS of government have predicted that democracy, in the words of William Flinders Petrie, will ultimately "eat itself up," that the majority always chooses the easy road, taking the cash today without thought of what the morrow may bring.

A corollary is that the State never relinquishes its powers voluntarily. "The mind of man is fond of power, increase his prospects and you increase his desires," said Gouverneur Morris, urging Executive curbs at the Constitutional Convention in 1789.

History will soon write another page, chronicling a decision American democracy must make. It must decide whether political controls of our lives and livelihoods, accepted by our people as a war measure, shall become a permanent part of our social and economic structure.

Consider recent events in Great Britain.

President Johnston, of the United States Chamber, reported in last month's *NATION'S BUSINESS* that he found in England a growing acceptance of, or resignation to, the projection of war controls into her peace-time economy. Now comes Home Secretary Morrison with dire prediction of "social and economic catastrophe" if Britain abandons in peace the government controls imposed for the purpose of organizing the Empire for war. If these controls have merit in war, they have no less merit in peace, says Mr. Morrison.

This distrust of democracy is echoed among our own timid souls. Our frontiers are gone. We have reached a rocking-chair maturity. The resourcefulness, courage and moral responsibility of the individual are horse-and-buggy virtues. Private enterprise carries within itself the seed of its own destruction. In its place must come government authority to regiment every citizen with licenses, permits, directives and allocations.

So runs the argument of the home front Jere-

miah, who call themselves liberals and progressives. In truth, they are reactionaries who would take us back to the conditions in Europe which drove real liberals to cross the ocean and build here a society where the individual was master and the State the servant.

There is a second school of thought which believes we can have our cake and eat it, too. This school proposes an economy half slave and half free, based upon a "partnership" between government and business, such as the Delano Planning Board recommends. Ironically enough, this is the kind of "partnership" the German people accepted from Mr. Hitler, only to discover that he brought nothing to the "partnership" save complete control.

There remains a third group of citizens, who hold firm their faith in the individual, and who cherish the freedoms of choice and action, as they distrust Statism. This group rejects the "mature economy" bugaboo as vigorously as have earlier generations of Americans.

Today's men of faith foresee a resurgence of private enterprise, if the people through their representatives permit a program of full production by freeing the individual of handicaps and restrictions.

To those who fear that after this war we may live "on an island of democracy in a totalitarian world," they reply: Our ancestors created here an island of democracy in a totalitarian world. We can preserve what they built.

The decision of young America—and its parents—will answer another and more disturbing question: Is the stock of pioneer America deteriorating? Faith in ourselves, grievously beset at times, leads to the belief that America will choose the hard way because it is the free way.

Merce Thompson



Now the Army gets its gas through **SYNTHETIC RUBBER** "sleeves"

NOW it can be told how our invading armies are kept supplied with the thousands of tons of gasoline and oil their trucks, tanks and airplanes consume in every day's advance. It is delivered through a revolutionary new portable pipe line that can be laid *many times* faster than conventional fuel lines.

This speed is possible because the pipes are neither bolted nor welded together. They are quickly joined by a patented coupling called a "Gruvagrip"—sealed with a leakproof gasket of Goodyear's oil-resistant synthetic rubber Chemigum.

This gasket slips over adjoining ends of pipe like a sleeve, holding them in firm grip. It is then locked in place by the "Gruvagrip" coupling that keeps that gasket from ballooning under pressure.

The joint is sufficiently flexible to permit laying the line over rough ground, without trenching.



Due to Chemigum's impermeability to gasoline, the gasket does not disintegrate in contact with high-test

fuel, as natural rubber would. In Africa, these portable pipe lines delivered upwards of 700 tons of aviation gas per day to advanced air-dromes many miles inland, releasing fleets of trucks for other duties.

Today Goodyear's entire Chemigum production is required for this and other military uses. But the day is coming when there will be enough of this war tested synthetic rubber to produce many civilian and industrial needs that require a truly oil-resistant rubber for dependable, lasting service.



Chemigum (pronounced Kem-e-gum)—T. M. The Goodyear Tire & Rubber Company

GOOD YEAR
THE GREATEST NAME IN RUBBER

What Business Does with Money

By **ENDERS M. VOORHEES**

Chairman of Finance Committee,
United States Steel Corporation

IT IS in the hands of the financial officers of our corporations to change the annual report from what has been mostly a dismal chore into a living, pulsating thing that will carry to the American people the documented story of how and by what we live.

I am not going to suggest streamlining reports by sprightly changes in typography, or by adding photographs or cartoons or ranks of little mannequins or piles of dollars, or otherwise pepping up the presentation. Neither am I going to suggest telling the story merely to evoke admiration as to how good we all are and how little room there is for improvement.

I am going to suggest that we, the financial officers, must report our doings in such fashion that the basic social function of our enterprises is clearly portrayed. Only then will business be held to the highest degree of responsibility for what it can and should do, and not be hampered by being asked to do what is not in its power to do. The annual report is one of the most effective methods of presenting the simple facts to the public.

The financial side of business has never been articulate. We hear a great deal about production for use as being somehow more desirable than production for what is called profit. Translating that into a simple problem of bookkeeping, we are asked to believe that if everyone produced at less than

(Continued on page 56)

U. S. STEEL CORPORATION and SUBSIDIARIES

CONSOLIDATED STATEMENT OF INCOME

	YEAR 1942	YEAR 1941
Sales and Revenues		
Sales and revenues, less discounts, returns, allowances and bad debts	\$1,861,940,280	\$1,617,410,003
Interest, dividends and other	4,011,412	4,945,919
TOTAL	1,865,951,692	1,622,355,922
Costs		
Employment costs:		
Wages and salaries	725,750,899	590,233,976
Social security taxes	24,245,901	22,856,726
Payments for pensions	32,664,901	15,184,433
	782,661,701	628,275,135
Purchased products and services ..	648,401,343	579,640,279
Depletion and depreciation	91,765,371	86,756,339
Amortization of emergency facilities	31,962,146	9,948,140
Loss on sale of fixed assets	4,434,013	1,885,708
Estimated additional costs applicable to this period arising out of war	25,000,000	25,000,000
Interest and other costs on long-term debt	6,153,392	6,033,398
State, local and miscellaneous taxes	48,255,157	49,945,848
Estimated Federal taxes on income	155,500,000	118,700,000
TOTAL	1,794,133,123	1,506,184,847
INCOME	71,818,569	116,171,075
Dividends		
On cumulative preferred stock (\$7.00 per share)	25,219,677	25,219,677
On common stock (\$4.00 per share)	34,813,008	34,813,008
Carried forward for future needs		
	\$ 11,785,884	\$ 56,138,390

THIS IS not merely the financial story of the United States Steel Corporation. It is an example of what some 2,750,000 business firms, large and small, do with their income—and the effect on our way of life in America

Common Sense and

AS CAMPAIGN FLAGS are unfurled for 1944, a familiar bugaboo is being disinterred from the morgues of political experience. There are those who think, and perhaps rightly so, that the creature can serve yet another season, provided it can be painted in sufficiently sinister colors. Its performance may not be as impressively blood-curdling as in 1932 or even 1940, but it still has some terrific grimaces in its system.

The convenient bugaboo, of course, is Big Business.

Already, the class-angle politicians are making it their Number One whipping boy. Now, as in earlier campaigns, their indictments are generalized. Attempts to pin them down to specifications are not successful. They find easy applause and headlines by sensational broadsides aimed at our largest American producing units. The very bigness of Big Business makes it an easy mark and hence an almost irresistible temptation to demagoguery.

Now I do not propose to write a defense of Big Business. Some of its most articulate spokesmen have in recent years acknowledged mistakes—mistakes of omission more often than those of commission. On the contrary, I agree that Big Business has sometimes failed to face up to its social obligations. It took a fearful depression and a decade in the doghouse to teach some of them that immense expansion carries with it immense public responsibilities. By very reason of its enormous dimensions, moreover, Big Business has been less quick and agile in adjusting itself to changing economic ideas and conditions.

But I do wish to insist on a modicum of sober common sense in dealing with the problems and ethics of American Big Business. Let us remember that there is no segment of American society against which charges of exaggerated self-interest, misuse of power, short-sighted policy and plain blundering cannot be leveled with as much justice—and occasionally more justice—as against Big Business.

Where injustice and mischief arise

ORGANIZED labor, agriculture, small business, the liberal professions, big government—which of them has not made mistakes comparable to those debited to Big Business?

It is in the singling out of Big Business for verbal and legislative punishment that the injustice and the mischief reside. The wild assaults, implying or asserting that Big Business alone or mainly is to blame for all our national and international headaches, seems to me sheer rabble-rousing of a dangerous variety. By setting up an official villain and scapegoat, the real issues are tragically confused and the chance for solving real problems is sacrificed.

The savage medicine man sets up a symbol of disease and in belaboring it thinks that he is curing the ailment. The political medicine man, in about the same way, sets up Big Business as the symbol of economic trouble and thinks that in castigating it he is curing those troubles. The fact that the procedure is decked with the phraseol-

ogy of liberalism and humanitarianism makes it no less harmful. Far from curing the national and international headaches, that kind of demagoguery only makes them more painful.

Try a simple experiment on the next excited rant against Big Business, whether he be a political bigwig or a street-corner orator. Ask him whether he would, if he could, *abolish* Big Business; whether he would split each of the great automotive and aviation organizations into a thousand small pieces; if he would like two telephone services in the same town; whether he would dismantle the American Tel & Tel, General Electric, Radio Corporation, U. S. Steel, Sears-Roebuck or any others you can think of.

What the political medicine men want

IF HE says yes, pursue the matter further. Inquire whether he is willing to give up the cheap and abundant products, the efficient services, the scientific research, the higher wages which are self-evidently made possible by Big Business.

It will appear quickly enough that the political medicine men want to eat the cake of American large-scale productivity and distribution and to have it. They want the fruits of mass production while destroying the great business aggregations which make mass production possible.

They are proud and even grateful for the miracle achieved by American industry in the present war crisis. They will grant that American techniques of production and economic organizations have made it possible to smother the Axis threat in an avalanche of American war goods for all the United Nations; and that prodigious American economic wealth is the main hope for rescuing mankind from mass starvation and chaos in the postwar period. And I mean on a sound business basis, not on an international WPA. Yet they will spout nonsense about breaking up the gigantic forces that have made these things possible.

The detractors of Big Business like to accuse its leaders of wishing to "turn back the clock of history." The accusers are themselves guilty of clock-turning if they seriously desire to wipe out Big Business and restore more primitive types of economic life. Their thinking is the more reactionary because it is based on fantasy and a false Utopia.

The rock-bottom fact is that Big Business is an intrinsic expression of our technological epoch. It is most highly developed in these United States because we have made ourselves the most technologically advanced nation in the world.

Big Business is not a primary cause but a result. It is not something tacked on to our way of life which can be removed by a neat surgical operation, but is bone of the bone and flesh of the flesh of our society. In the final analysis, an attack on the idea of Big Business—as distinct from justified criticism of specific practices or policies—is an attack on the American type of civilization.

The same kind of attack may be made against every

"Big Business" By ERIC A. JOHNSTON

President, U. S. Chamber of Commerce

other department of American life. Consider organized labor, for instance. It is easy, and tempting, to condemn trade unionism because its house is not always in order, because some of its elements have been corrupt. There are demagogues aplenty who empty all the vials of their wrath on organized labor—and they belong in the same category as the all-out ranters against Big Business.

One exceedingly curious paradox needs to be examined. Only a few crackpots think that mass-production industries and mass services can, at this stage of economic evolution, be broken up. Other critics of Big Business, when pressed for an alternative, have to resort to government. Some of them, indeed, do not have to be pressed, since they frankly advocate some brand or other of the collectivist state.

But State Economy happens to be the *biggest business aggregate of all!*

And therein lies the paradox of the situation. In their anger at Big Business, the critics seem willing, nay eager, to swallow super-big business: a single monopoly of all production and distribution administered by the one group of all-powerful bureaucrats.

We need only look at the ultimate of "big business" as it has been operating in Germany or Russia to realize that there is no abuse ever charged against great corporations which is not practiced, with a vengeance and with total immunity, by the extreme in monopoly which is state capitalism or state socialism.

Big Business is subject to the curbs of government surveillance, the brakes of public opinion, the limitations of law. State Economy is a law unto itself, since economic and political power are in that case merged and inseparable. However this ultimate in power may be disguised as the popular will, it reduces the individual to slavery. Where there is only one employer—the state—only the demented will risk its enmity.

Those who would cure what they regard as the evils of Big Business by embracing a state super-monopoly blanketing all human existence, will cure the disease, if they succeed, only by killing the patient. In warning them against their illogic, one should not accept the abuses of capitalist economy or ignore legitimate curbs and regulations. One must merely recognize that our job, as a nation, is not to kill off Big Business—or Labor or Agriculture—but consistently to improve them and to make them productive to the maximum and beneficial to the nation at large.

Every small business man I have ever met—and I am

a small business man myself—has hoped and worked to become a big business man. That's in the temper of America. Does it mean that he has deliberately sought to join a class of predatory outlaws?

To ask the question is to answer it. The average American knows instinctively that Big Business is natural and essential to the particular kind of country in which he lives and which he is now defending with his life.

Big business helps small business

THIS time the techniques of the medicine men of politics will fail. They will fail because the evidences of American business achievement as the decisive weight in turning the scales of victory in our favor are too clear to be gainsaid.

Hundreds of thousands of small business men know from direct experience that their prosperity and their survival are tied up with the healthy functioning of what is termed Big Business. Our mass production industries have done more in a day to keep little business alive than all the legislative investigations and political

ballyhoo in a year. There are scores of "big businesses" each of which has a thousand or more small outfits working at top speed to supply parts. This interrelation is not temporary and not accidental; it is intrinsic, and it should be nurtured as a wholesome phase of our industrial set-up.

We have passed through a period during which it has been fashionable—and politically profitable—to focus attention on the abuses of our capitalist system, while ignoring or even denying its advantages and accomplishments.

Counsels of despair, couched alluringly in the lingo of panaceas, have been in the forefront. Conflicts and contradictions among

the various elements entering into a complex industrial civilization have been emphasized and inflamed, while areas of agreement have been overlooked.

The time is ripe for a reversal of these things. There are immense areas of agreement among all elements of our great nation. There are more mutual interests, more common stakes in the American system, than the medicine men can see through the blur of their emotions. There are unlimited possibilities for adjustment, for reform, for sensible control without senseless suppression of economic forces. The hope of America—and therefore of the world—lies in the recognition of these realities.



EWING GALLOWAY



"Only a few more steps and our banks will be all government," says A. L. M. Wiggins, new head of the American Bankers Association

Who Shall Risk Your Savings

By CARL BROWNE

THE AMERICAN people—including business men—have been seduced by the ease with which they can get money from the Government.

That's a conclusion of a business man whose banking sideline has led him to the presidency of the American Bankers Association.

Today more than 40 federal agencies are lending, or otherwise distributing, cash. Citizens go to the Government's easy-money banks to borrow for seeds, war plants, houses, electric lines, feed, and a score of other things. Usually they get terms that no banker could offer. But no private banker may draw upon the resources of the United States Treasury to cover his mistakes, his overhead, losses or service costs.

"What's the difference?" is a common attitude. "The Government can stand the loss."

There is evidence today, however, that the "seduced" are beginning to wonder about the source of the Government's easy money, and whether a government's allocation of this money to social purposes will meet the economic needs of the future. Will the present system of government allocation of the nation's savings serve the financial needs of the post-war period?

According to the record, it will not—because government cannot finance the new, adventurous industries that create new employment. Political administrations must show results quick-



ly or be voted out of jobs. The record shows, too, that governments refused to accept Morse's telegraph, the Wrights' airplane, Stevenson's railroad when these were offered to them. Only private initiative will take the risks that create new employment.

The trouble is that today, the private initiative banking system with which America has developed world leadership in commerce and industry, living standard and individual wealth, is overlaid with government domination.

Life or death question

THIS has caused A. L. M. (Lee) Wiggins, new president of the American Bankers Association, to pose banking's "life or death question."

"The life or death question which the private credit system must soon answer is whether or not it is willing, able, and ready to take care of the credit requirements of an expanded postwar economy," he says.

"Unless it does so, the Government will do the job, and our nation will take another fateful step down the road of state socialism.

"Commercial banking has a forth-

right and affirmative answer to this question. Its liquid resources never were greater, its desire to serve never stronger, and its machinery was never in better order.

"But free enterprise under politically administered credit is not only

unthinkable, it is impossible.

"Today government is in the banks up to their eyebrows. The federal Government is the biggest single factor on both sides of the ledger. Non-government items in the average bank statement are but a small and declining part of the whole. Only a few more steps and our banks will be all government.

"Surely all of us recognize the need for sound and adequate supervision in the banking business. We have not been blind to the necessity of certain governmental agencies in the field of finance.

"But in addition to regulation, control and competition, the federal Government has embraced banking for its own purposes to such an extent that we may be feeling the embrace of death for all chartered banking which functions under private initiative.

"A government that creates and administers credit can extend or withdraw it at will. It can impose its pleasure upon the business organizations to which it lends or refuses to lend. Therefore it has the destiny of industry, commerce and agriculture in its hands."

(Continued on page 50)

The Duke Went a-Banking

By SAMUEL CROWTHER

JOHN LAW'S financial sense restored France to such prosperity the politicians insisted his bank should be government-operated. The idea didn't work then, hasn't worked since

DURING the first quarter of the Eighteenth Century, one of the great reforming figures of all time flashed across Europe, found a haven in France under the Regency, made that nation the wonder of the world and became a demigod.

Within three years, he saw the nation he had sought to save wreck itself through greed and found himself a fugitive, blamed for crimes that others had committed.

That man was John Law.

Although he has come down in history as a knave, he was to banking what the geniuses of the Renaissance were to the arts. Although he failed to do with money what it was beyond the power of money to do, he did more with money than anyone before him had ever done. Had he been less brilliant in rearranging the finances of France and had his plans been less sweeping, he would never have been crowned as a wonder man and, therefore, would not have been forced into doing those things which wrecked both his system and France.

John Law believed he could give France a currency which would revive trade and bring about a general stability.

That he did.

He believed he could raise what would now be called the standard of living by lowering taxes and interest rates and putting both on a business basis.

He did that, too.

He believed further that, by establishing a great trading company, he could not only provide a universal means for investment but also take



John Law told the Regent he would make him the richest man in the world. The Regent wanted details—and he got them

over a national debt, that had been repudiated except in name, and free the citizens from most of the expenses of government.

In this he failed and, because the failure swept away the benefits he had brought about, only the failure is remembered.

John Law was born in Edinburgh in April, 1671, of Jane Campbell—a connection of the Duke of Argyll—and William Law, a prosperous goldsmith who, as was the custom, was also a kind of banker. His bills were everywhere accepted.

The father died when John was only 14, and his elder brother carried on the goldsmith business and also managed the two considerable landed estates the father had bought. John, who was exceedingly strong and exceedingly handsome, was not interested in goldsmithing. He quickly developed into a profound student with

such a genius for mathematics that one of the leading surgeons of Edinburgh, prophesying that the boy must die young, bespoke his brain for examination. Reaching his majority, he set out for London to master, he said, the art of gambling, the art of love and the art of money.

Having a substantial fortune and a taste for the quietly expensive, he soon became a man of fashion. For two years he continued to study in his chosen fields, laying a thorough groundwork in the art of money, mastering the art of gambling so completely as to keep his fortune ahead of his expenditures, and making such satisfactory progress in the art of love that he became involved in a duel with an old profligate whom he deftly stabbed.

For this he went to prison, sentenced to be hanged, but the court

(Continued on page 84)

Preparing Postwar Jobs

By LAWRENCE SULLIVAN

WAR IS ALWAYS a hurry-up job. That is the theory of priorities—to hurry things along. But the rush is always greater at the outset. Then, the military services need everything in almost immeasurable quantities—promptly, immediately, at once.

In such circumstances there was no time, in 1940 and '41, to pause for cost analyses, administrative margins, profit ratios. Several thousand military items were needed in lots of millions. Many of them had never been manufactured before in the United States. No one knew what they would cost. For some, new plants had to be built, new tools designed. In many cases it was impossible even to estimate accurately what the plants would cost, or how much they would produce.

These problems gave management today's big headache—renegotiation.



Price Adjustment Board findings are not subject to judicial review

Eliminating "Profiteers"

INDUSTRY INSISTS, and was among the first to insist, that there must be no excessive profits during the present war; that the word "profiteer" be erased completely from America's current vocabulary. The outstanding accomplishments of American management and labor in war production for our armed forces will not be blurred or blotted. There is neither justification nor necessity for excessive war profits. . . .

Assuming that our present tax laws are adequate to recapture for the Government all excessive profits in at least 90 per cent of the cases, is it possible to perfect them so that they will prove adequate in the remaining ten per cent of the cases? Our answer is "Yes."

Summary of our position:

1. The recapture of excessive profits through so-called renegotiation cannot be justified.
2. The delegation of unlimited and uncontrollable powers essential to an administration of recapture through so-called renegotiation is dangerous and un-American.
3. The power of taxation is the only acceptable power granted to the Congress by which profits in the possession of a citizen can be taken for the use of his Government.
4. If the Congress determines that our existing tax laws are inadequate to prevent in every case the retention of excessive profits, then the tax laws should be amended.
5. If appropriate amendments to existing tax laws are adopted, they should become effective as of April 28, 1942; and every war contractor or subcontractor should have the option to pay the additional taxes thus imposed upon his 1942 profits or to remain subject to renegotiation.

(From the testimony of ELLSWORTH C. ALVORD, Chairman of the U. S. Chamber's Finance Committee, before the House Ways and Means Committee.)

The war contracts were awarded on the basis of "guesstimates." A unit price was fixed, more or less arbitrarily—anything to get production going.

There was no warning at the time that these contracts might be revised. Not until April 28, 1942, did Congress authorize renegotiation by Price Adjustment Boards established in the Army, Navy, Maritime Commission and Treasury. Since then all contracts have been let with the understanding that they would be renegotiated.

But the law was retroactive! It covered all war contracts, even those which already had been completed at the factory, if not finally paid for. Indeed, one ship-builder was renegoti-

ated on an aircraft carrier several months after the carrier had been lost at sea!

That's why, since April, 1942, American industry has been unable to draw a balance sheet. Reduced to practical terms of daily management, every war production plant now is operating on this basis:

"Turn out as many as possible, as quickly as you can; in a year or two we'll tell you what you're to be paid for them."

A Louisiana cotton mill, for example, was jogging along at about 40 per cent of capacity on fabrics for workshirts and overalls. Suddenly it received a telegram from Washington demanding prompt shipment on cloth

in the Dark



In renegotiation, there is no profit formula. One airplane builder came off with a margin of 1.9 per cent, after taxes; another got 9.1, and another 4.1

for 150,000 dozen suits of underwear for the Philadelphia Quartermaster Depot. . . . "Specifications follow, airmail, special. . . . No delay can be tolerated. . . . Wire acknowledgement of this order promptly. . . . When will shipments begin?"

Political crusades

BY some mysterious managerial alchemy, the workshirt and overall business was wound up that evening. In less than two weeks, the first truckload of underwear fabric rolled off for Philadelphia.

So it was with tanks, ships, planes, artillery, ammunition, gun mounts, small arms, life rafts, ration kits, socks, handkerchiefs and parachutes.

Political crusades against profits are a routine wartime phenomenon, yet no critic of business has been able thus far to set down a workable formula of basic production costs, or to define reasonable profits. Conditions vary in every industry, even in different plants. Early in 1942 a proposal was introduced in Congress to limit all profits to six per cent of the gross war contract. This would be straight-out cost-plus, demonstrated many times as the most wasteful arrangement ever devised for govern-

ment contracts. The suggestion was abandoned when the military services showed that, in many industries, this margin would not call out the necessary volume of production, after allowance for development expenses, research, re-tooling, and taxes.

As an alternative, Congress approved the Price Adjustment Law, requiring the several departments to establish cost analysis sections and to renegotiate all contracts exceeding \$100,000 upon suspicion of excessive profits. The law was so written as to apply to all contracts made before April 28, 1942, where payment had not been completed by that date.

But the law did not define reasonable profits. It established no standards to limit the authority of the administrative departments. Congress delegated the power to renegotiate to the President, who in turn, delegated it to the Army, Navy, Maritime Commission and the Treasury.

Each of these departments then delegated it to its own Price Adjustment Board. The Army delegated it on May 17, 1942, to the Quartermaster General, the Chief of Air Corps, Surgeon General, Chief of Ordnance, Chief of Engineers, and so on through all the branches of the service. Each of these military branches next dele-

gated it further to their regional commanders. Today, the Army alone has 44 Price Adjustment Boards operating under six different service branches.

At least \$35,000,000,000 in war contracts are in process of renegotiation. Yet there are no rules, no published procedures, no standards of measurement. Every case is handled on merit, whim or personal predilection. The findings of fact, as finally determined by the various Price Adjustment Boards, are not subject to judicial review.

Cannot report profits

AS of June, 1943, no less than 12,622 different corporations thus were suspended by their financial fingernails, while operating at top speed on urgent war contracts. Yet a vast majority of these corporations could not, even today, present a final statement covering 1942 operations. Not until they have been thoroughly renegotiated may they report their profits, if any.

In some cases, manufacturers had paid large income taxes computed on the basis of their original contracts. After renegotiation they actually owed less than half of the taxes already paid! Because of the delay in

obtaining the tax refund, some managers had to borrow money to keep going.

Even when he knows that renegotiation is just around the corner, the corporation comptroller still has no basis of experience or policy on which to estimate what might happen. The House Naval Affairs Committee has studied some 80 renegotiation settlements in detail. One left a margin of nine per cent of gross sales, after taxes. Another left 16.2 per cent. One great airplane builder came off with 1.9 per cent, after taxes, but another got 9.1, and another 4.1. One electrical equipment producer netted 0.9 per cent, another got 7.5.

Chairman Robert L. Doughton, of the House Ways and Means Committee, developed the element of raw chance which figures in the renegotiation proceedings in his cross-examination of Robert P. Patterson, Under Secretary of War, on Sept. 20, 1943.

"You have no formula, as I understand it?"

"That is true," Patterson replied.

"Each Board is a law unto itself?"

Doughton pressed.

"We do have no fixed formula; that is true. We have tried to frame one, but we cannot; and I do not believe anybody can."

Doughton cited a contract from his own state. On a gross transaction of \$550,000, a refund of \$10,000 was demanded from the company.

Doughton explained: "The person who was handling his case gave him no bill of particulars, but merely said that he owed \$10,000. That is one of the complaints made here, that when the Government assesses men on the ground that they have made excessive profits and requires them to refund money, it gives no bill of particulars. It does not show in detail why they have been found to owe the Government, or why they are required to refund, or how it has been calculated."

Hard to justify

SECRETARY Patterson acknowledged, "It is rather hard to justify on principle," but insisted renegotiation should be retained, perhaps with some amendments to the present law.

Congress has investigated renegotiation from three different approaches. The Truman Committee of the Senate sought to determine if renegotiation distractions impaired management. The House Naval Affairs Committee conducted extensive hearings to discover the impact of renegotiation on potential future procurement. Finally, the House Ways and Means Committee studied the subject as an aspect of federal taxes and fiscal policy.

In each of these hearings, management has entered a strong appeal for clarification and coordination of the

present indefinite and muddled situation. Said one manufacturer of bomber equipment—his plea is typical of hundreds found in the 3,000-page record of Congress:

"Renegotiation of war business is a constant and serious threat to our continuing in business. From my observation, the administration of this act follows no pattern and is entirely without basic plan. I feel that it is discriminatory, that it penalizes initiative, and that it kills incentive in thousands of small manufacturers to help win this war. Some companies such as ours have played a tremendous part in the war effort. . . . Without us, large prime contractors could not have produced war material at anything like the speed with which it has been turned out. . . . We are collectively a fairly large source of tax revenue. In the meantime, over and above all our present problems and the future ones we are trying to solve, the question of renegotiation hangs like a cloud. In our own particular case, we have been asked to refund to the Government 50 per cent of our net profit before taxes, although our profit after taxes for that year amounted to only 4.2 per cent." (Henry W. Jones, President, American Tube Bending Co., New Haven, before House Naval Committee, June 23, 1943, Hearings, p. 809.)

In renegotiation, there is no fixed procedure. There is no fixed profit formula, even for the major industries.

Stockholders hit

AS a matter of general policy, all renegotiation conferences begin on a statement of earnings *before federal taxes*, as if taxes were not a part of the cost of doing business. Congress has been impressed by repeated petitions that, at least, renegotiations should begin on profits *after taxes*, never before.

"Another difficulty," testified DeWitt Emery, President of the National Small Business Men's Association, "is that you have three or four active Price Adjustment Boards, each operating independently of the others, and there is no similarity between their awards. The Navy renegotiates the fellow on one side of the street and allows him a certain percentage. The fellow over here is renegotiated by the Army, and allowed another percentage."

Stockholders likewise have been hard hit by renegotiation. Corporation reports offer little to guide the investor when his company still is subject to renegotiation. One large corporation reported earnings of

(Continued on page 72)



"You can make me an offer but I won't promise to consider it"

How a home-front army suffers heavy casualties

TO EMPLOYERS:

BECAUSE far more accidental deaths and injuries occur in homes than on the job, Home Safety is a major factor in reducing absenteeism in business and industry.

This message on Home Safety may prove useful to your employees. On request, Metropolitan will gladly send you enlarged copies for posting on plant bulletin boards.

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heaters, toasters, etc., inspected and repaired. Replace frayed cords and loose plugs.



Watch out for leaks in gas appliances and pipes. Clean chimney flues and heating equipment regularly.

Practice good housekeeping. Stairs and landings should be kept free of brooms, toys, boxes, and other objects which might cause falls.



Scatter rugs should be securely anchored. Don't use wax too liberally on floors and take care that it is rubbed in thoroughly.

Tie back kitchen curtains so they won't catch fire. Knives and sharp instruments should be kept in a safe place when not in use . . . handles of pots and pans on the stove should be turned in to avoid tipping.

Keep furniture and other objects out of the way so you won't trip or stumble over them.



Develop careful habits. Use a step-ladder, or a straight, strong chair—not the nearest rocker or box—when reaching to high places.

Careful householders will disconnect electric appliances like irons and curlers before leaving the room. They will never leave a hearth fire unguarded, whether gas, wood, or coal.

Close cupboard doors and bureau drawers promptly to avoid collision. Get rid of broken glass or other sharp refuse as quickly as possible.

Hands should be dry when touching any electrical switch or apparatus.

Make a tour of your home this very day.

Check for yourself, and urge your family to practice these three basic safety principles. Don't give an accident a chance to happen!

LAST YEAR, twice as many Americans lost their lives in accidents within their own homes as were reported killed in battle in the first 18 months of this war!

In the same year, *well over three quarters of a million* workers were temporarily disabled by accidents in their homes.

The working time lost by this huge Home-Front army was enough to operate more than 50 war plants, each employing 1000 people, for an entire year.

Most home accidents need not happen. Carelessness is the chief reason why friendly, familiar surroundings are so often the scenes of accidents which cause pain, grief, and financial loss.

The practice of the three basic safety principles outlined below would eliminate most home accidents.

Remove danger points. Keep stairs, including railings, in repair and well-lighted . . . a greater number of serious accidents occur on stairs than in any room.

Have electrical equipment, irons,

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Enter: The Electronic Age

By VERNON E. BRINK



Defects in metals ranging up to eight inches thick can now be detected by this portable 1,000,000-volt X-ray machine

SEVERAL years before World War I, a new and amazing instrument emerged from the laboratory. Wireless enthusiasts, playing with their crystal detectors, called it the *audion*, a vacuum tube capable of receiving radio waves and amplifying them.

In the hands of military researchers during the war, the vacuum tube developed into a powerful, versatile tool. Within several years radio broadcasting as we know it had begun. Within ten years sound pictures replaced silent movies and, scarcely ten years after that, television was born.

The technical story of these developments does not concern us here.

To put it simply, what the vacuum tube had accomplished was the release of electricity from its confinement to wires. Electrons—that is, negative electricity—had been brought under man's control. Divorced from the influence of the atom, electrons could be made to move freely through a vacuum or gases, and—by electrostatic, magnetic, or electromagnetic means—could be harnessed and put to work.

Today the family of vacuum or electron tubes has grown to more than 400 different types, ranging in size from tiny globes to cylinders several feet long.

INDUSTRY is now using radio waves to weld, glue and rivet—and it may put sound to work in chemistry

Even before World War II, electronics was no pygmy industry. Now, new developments are taking place so rapidly they have already started a minor revolution in our ways of doing things in innumerable fields.

Two years ago, for example, industry had but one portable 1,000,000 volt X-ray unit; now it has at least 40. These super rays detect defects in parts made of steel and other metals ranging up to eight inches thick. Thus they make unnecessary the older, wasteful method of testing metal parts to destruction.

Aids orange growers

IN the food industry, X-rays examine candy for foreign materials, check packaged goods for deficiencies in fill. Using an X-ray unit to distinguish frozen oranges from good ones, California orange growers in one record year saved more than \$7,000,000 because, without this testing, the entire frost-touched crop would have been a total loss. Similar fluoroscopic X-ray inspection checks golf balls, molded plastics, rubber heels, tires and wire insulation.

In the experimental stage is the use of X-rays to produce different strains of flowers, or possibly better fruits and vegetables, or grain and cotton of finer quality and greater yield.

In another field of rays, the ultraviolet ray is as invisible to the human eye as the X-ray and just as valuable. On these rays are based lighting systems employing the fluorescent tube, and sterilizing systems that kill up to 99 per cent of the germs in the air.

Just as electronics ("electricity freed from the bondage of wires") has given us eyes to see through things, so is it giving us eyes to view the infinitely small. Using electrons instead of light rays, and electromagnetic or electrostatic fields instead of glass lenses, the electron microscope, only a few years old, has



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"Mother! Bob's ship's in!"

A thousand miles away, a bronzed young ensign has stepped ashore for the first time in months. And a Navy bride has just received the happiest words in the world.

Tonight, she'll be speeding to him—for a brief, belated honeymoon before he puts to sea again.

She is one more reason trains are crowded now and Pullman travel is the heaviest in history. There'd be no problem handling such a load if the whole Pullman fleet were in regular passenger service. But it isn't. Many cars are assigned to special troop trains, moving an average of almost 30,000 men a night.

So fewer cars must serve more people. And there are bound to be some inconveniences, at times. Occasional disappointments, too. But most wartime trav-

elers cheerfully accept whatever accommodations are available.

That's partly because they feel, as Pullman does, that boys in uniform come first. And partly because they look on Pullman travel now not simply as an overnight adventure in a sumptuous way of life but as an overnight *vacation* that refreshes weary minds and tired bodies.

It relaxes taut, strained wartime nerves. Gives passengers a precious opportunity to do nothing for a change and thus, as like as not, starts those little grey cells to working on thoughts there hadn't been time to think. Then, when bedtime comes,

Pullman privacy and comfort invite sleep so compellingly that the cares of a war-torn world dissolve in pleasant dreams.

So, if yours is a *necessary* trip—one on which you must get there feeling fit to do the *total* job that *total* war requires—go Pullman, by all means.

You'll have a place to sit and a place to sleep that are *all yours* straight through to your destination. And you'll be leaving coach space for *necessary* travelers who can't afford the privacy and comfort you'll enjoy.

★ **BUY MORE WAR BONDS NOW!** ★

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now made magnification possible up to 100,000 diameters. That means the opening of new worlds of knowledge in biology, bacteriology, medicine, physics, chemistry, metallurgy, and other fields of research.

New light on textiles

ALREADY the electron microscope has enabled scientists to observe the character of the tobacco mosaic virus—a deadly crop disease, costing growers millions of dollars annually; to control production of paint pigments so as greatly to improve the quality of postwar paints and inks; and to throw new light on the texture of textile fibers which will lead to better and longer-life tires and longer-wearing, warmer clothes.

The photo tube—the so-called “electric eye”—is helping today in war production by making possible operating tolerances that would have been considered fantastic a few years back.

Placed in the path of a beam of light, the tube stops or starts a flow of electrons when the beam is interrupted or established. The article to be measured casts a shadow, if the size is wrong, and the phototube operates a red rejection light.

In the steel industry, phototubes, installed at the top of ore bins, sound an alarm when the conveying equipment has delivered the proper amount. A recording spectrophotometer, utilizing a photoelectric cell, now provides the most reliable method of analyzing color ever devised by man.

The human eye can detect some 10,000 tints of reds, blues, greens, browns, and yellows. The spectrophotometer defines 2,000,000 different shades. It is bringing a revolutionary technique to the chemical, paper, textile, and paint industries.

Phototubes also prevent accidents by shutting off machines when workers' hands come too close to a moving part. Phototubes open doors, level elevators, serve as burglar alarms. Faster than any human reflex, they count objects at the rate of 50,000 a minute; spot pinhole defects in sheets of metal gliding swiftly from the rolls.

A master of detection, the ubiquitous phototube will have many postwar tasks, ranging from locating icebergs at sea, to reducing the amount of smoke and dust in the air, to providing a jury with conclusive evidence that a motorist has exceeded the speed limit.

Recently power engineers needed

a device to “ride the line,” so that emergency batteries, used in case power failed, would always be fully charged. Electronic engineers developed the electronic phanatron tube in a completely automatic, self-regulating battery charger.

Manufacturers of motion picture film and builders of delicate military instruments used to be bothered by dust in the air. Now they use high-voltage power to charge the dust particles in the ducts through which the air passes into a room. The electrically charged dust is attracted to a collector plate, and is removed. Similarly, another electronic device “smells” mercury vapor—a non-odorous, poisonous vapor occurring in certain industrial plants.

Just the beginning

FROM the phototube that measures light and the amplifier tube that amplifies sound to the electronic rectifier that provides power to produce war vital aluminum, the picture is the same—a vast one of unfinished trends.

In radio broadcasting—big brother of the electronics family—research in Frequency Modulation and television is going on.

Meanwhile, as the knowledge of radio waves expands, whole new branches in the science of electronics are being established.

Radio-frequency heating—or *radiothermics*—and *supersonics* are two such branches. Both promise to speed industrial processes and increase their efficiency and scope.

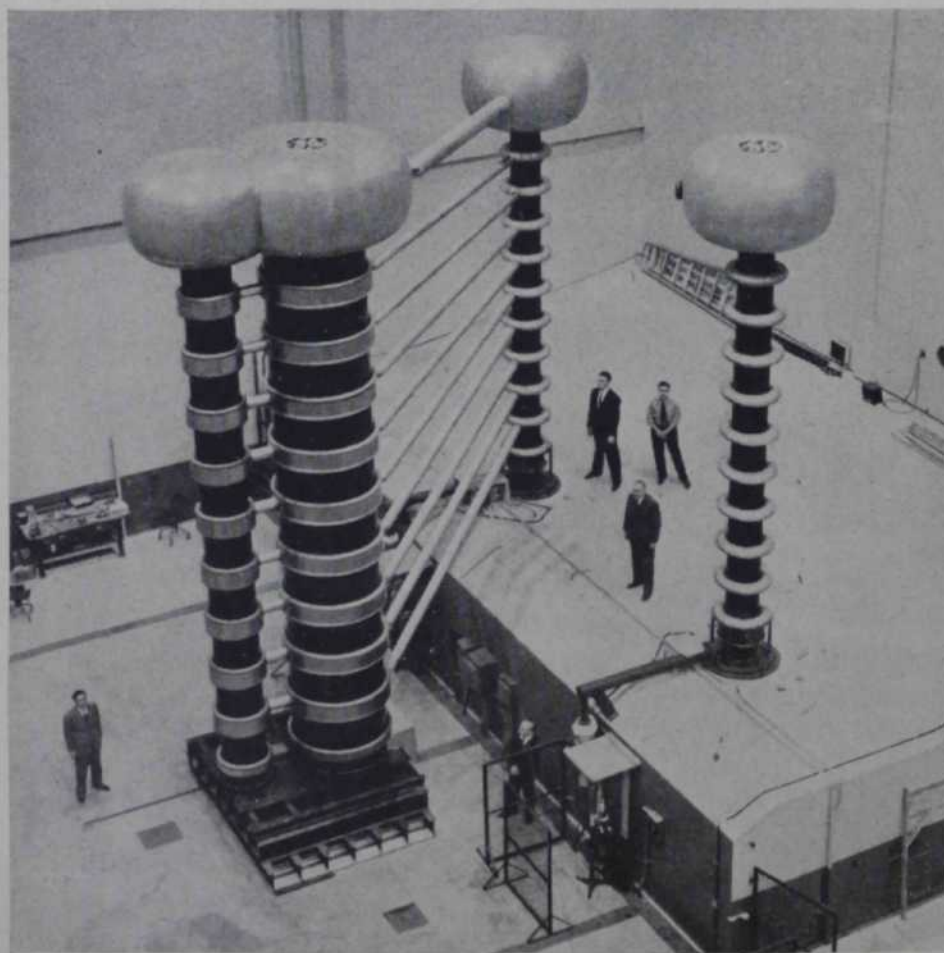
By *radiothermics*, radio waves may now be used to heat, dry, glue, stitch, anneal, weld and rivet, also to deactivate enzymes. Through induced heat produced by electron tubes, plywood may be processed in three minutes compared to three days under older pressure-methods.

Radio high-frequency “furnaces” are a postwar prospect; in them, railroad ties could be seasoned quickly, “cakes” of textiles dried uniformly. Even rubber may be radio “cemented” to wood or plastic; cloth stitched and seamed by radio heat, metals hardened, and fresh vegetables dehydrated without loss of flavor or color.

Supersonics, the art of putting to work sound vibrations of ultra-high pitch, may usher in a new age of chemistry, with radio being used as a catalytic agent.

Such is the science of electronics. Hardly a day passes in which some entirely new discovery is not made, stepping up production, increasing human efficiency.

Only imagination now limits the use of the vacuum or electron tube.



At the Bureau of Standards in Washington, Uncle Sam now has in use one of the world's largest X-ray machines—1,400,000 volts

"Six Mitchubishis going over..." for a one-way ride!

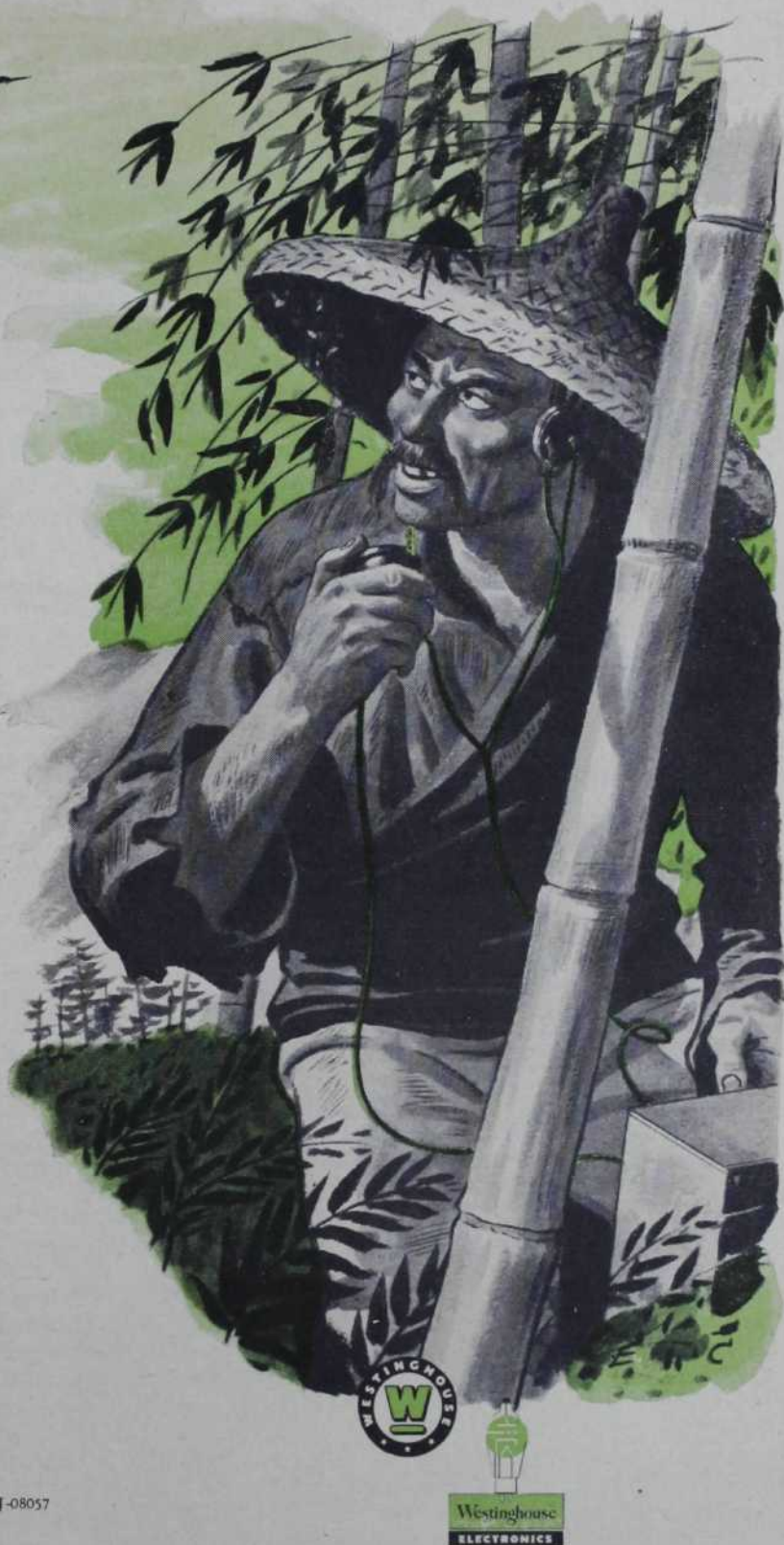
Five minutes away by P-40
Lu Yen's attack alarm
sends a Yankee fighter squadron
scrambling to rendezvous near ceiling.
There to wait—and hand
those bomb-heavy Mitchubishis
one-way tickets
to the arms of Shodzuka Baba
—Japanese "Old Lady of Hades."

Our lads won't be caught napping
on the ground . . . or in the air.
Teamwork-talk and tactics
by radio takes good care of that.

Those rugged, compact field radios
. . . like Lu Yen is using
(many of them Westinghouse-produced)
and now in service
on every fighting front
are the forerunners
of advanced communication
equipment and systems
that Westinghouse research
is already busy developing—
for factories—stores—offices
ships—planes—trucks—trains
. . . to enable men to talk
and work together—more efficiently.

So—come peacetime . . .
look for "Westinghouse"
on the finest communication and
electronic equipment—of all kinds!

J-08057



Westinghouse RADIO DIVISION *Baltimore, Md.*
PLANTS IN 25 CITIES . . . OFFICES EVERYWHERE

Piscatorial Solomon

By HERBERT COREY



DR. IRA N. GABRIELSON is a comfortably fat man on a hot spot. He is the Deputy Coordinator of Fisheries. The War Food Administration says we must have 6,000,000,000 pounds of fish and other marine products this year. Seven billion would be better. The fishermen say they will be lucky, very lucky, if they can produce 4,000,000,000.

The deficit is due to war upsets.

Because of these upsets the fishermen are obliged to deal with 23 government bureaus. Or departments, authorities and administrations. That automatically spells trouble.

Dr. Gabrielson is the middle man. He urges the 23 bureaus to deal pleasantly with the fishermen. He asks the fishermen to take into account the many factors that compel them to deal with the 23 bureaus. He reports that, on both sides, the key men are cooperative and friendly.

But there are so many regulations. So many orders. Each bureau or department is quite naturally absorbed in its own particular job. One may issue an order that interferes with the orders of the other 22. There has been no coordination. Perhaps there could not be any in the early stages of the war.

War Manpower may classify fishing as an essential industry. The more

fish netted the less will be the draft on beefsteak and soybeans. But the U. S. Employment Agency may recruit fishermen for what it considers more essential industries. War Shipping Administration and the Army and Navy have taken many of the best boats for patrol duty and transportation. Some of the most convenient ports have been closed to them.

Right in the middle of it

THE Navy has at times ordered the fishermen to keep away from some of their best fishing grounds. They have been forbidden to fish at night in certain areas. The Petroleum Administrator or the OPA may stop their fuel, and Defense Transportation may limit the shipping of their fish. The ICC may refuse ice—and an un-iced fish is likely to be a detriment to the neighborhood when it reaches the market. The WPB has refused Diesel engines and spare parts.

There are 13 other government agencies which may take a hand.

Consider that the men of the 23 agencies are all earnest to the point of belligerence until things can be ex-

DR. IRA N. GABRIELSON'S job is to bring order to the fishing industry, disrupted by the war, and subject to the orders of 23 different federal agencies

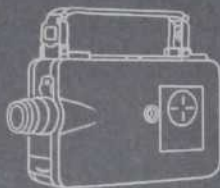
plained to them. Consider also that they are almost constantly engaged in conferences, interviews and battles, and that directives flow from them like maple sap. Consider also that the fishermen maintain that their livelihood is endangered by the rulings of officials who are only peeking at the whole problem.

Then consider the philosophic Dr. Gabrielson, right in the middle of it all. He becomes a mediator, a moderator, a fixer, aware that every contender has something of right in his contentions. Everyone, in fact, or everyone so far as noted, wishes Dr. Gabrielson to remain in his post as Deputy Coordinator and target.

"The fishermen," he says, "are meeting every possible trouble that any other industry has in conducting business in time of war. On top of that they have a lot of special trouble of their own."

Dr. Gabrielson is like the fat men that Falstaff found so admirable. He sleeps well o' nights. His voice is firm
(Continued on page 44)

From MIDWAY ON...



16-MM. KODACHROME, ACTUAL SIZE

These war movies in
full color were made with a
“home movie” **CINÉ-KODAK**

CINÉ-KODAK—designed for peacetime globe-trotting or tranquil home scenes—was turned loose in the hell of the Japanese attack . . .

You saw the Navy's movie, “The Battle of Midway”? Will you ever forget it? Navy men loaded Ciné-Kodaks with 16-mm. Kodachrome Film to get authentic battle data. Among the exploding bombs and burning oil tanks they made “The Battle of Midway.”

CINÉ-KODAK “CAME THROUGH” . . .

simply because it was designed and machined and fitted to the closest tolerances known to camera making. The concussions and banging around of battle were not anticipated. Getting excellent movies under *all* conditions was the purpose. After Pearl Harbor, this meant battle.

Literally thousands of Ciné-Kodaks are in Army, Navy, and Air Force hands, contributing to the most complete war record ever attempted in movies.

To study “pilot reactions” in a “9-G pull-out” dive—for the improvement of safety conditions—cameras are mounted to make movies of pilots during the human “black-out” . . .

Ciné-Kodak proved to be the camera which can do the job. Its precision-made governor and other working parts continue to run smoothly in the drag of “9-G”. . . 9 times the force of gravity.

Prize your Ciné-Kodak—it's a blood brother of these cameras which went to war . . . Eastman Kodak Company, Rochester, N. Y.



MIDWAY INCIDENT—A Ciné-Kodak was blown out of the operator's hands . . . hit the ground right side up . . . went ahead making the movie “on its own.”



EAGLES OF THE NAVY—In breath-taking maneuvers—even a 9-G pull-out dive—Ciné-Kodak Special proved its reliability.



ALEUTIAN EMBLACEMENT—The Army's saga of reconquest, “The Aleutians,” was largely filmed with Ciné-Kodak Specials.

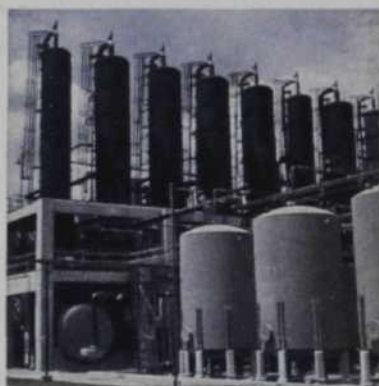
Serving human progress through Photography

TEN YEARS' WORK IN TWO

is the story behind Butadiene and Styrene for Synthetic Rubber



Distillation Column for Styrene



Where Distillation Columns separate and purify the Butadiene



Butadiene Storage Spheres

WE WISH YOU could see the first of the Government's large integrated synthetic rubber projects, complete at one location. What you see here is a night scene and some daytime views of the immense butadiene and styrene plants that CARBIDE AND CARBON CHEMICALS CORPORATION, a Unit of UCC, has designed and built at Institute, West Virginia, for the Government's Defense Plant Corporation and is operating for the Rubber Reserve Company.

Carbide and Carbon also has completed another butadiene plant at Louisville, Kentucky—and has released plans to Koppers United Company for a third butadiene plant near Pittsburgh, Pennsylvania.

Butadiene had never been manufactured in the United States in large quantities before the plants at Institute went into production. The task involved in providing the mass production facilities the Government asked for was an unusual one...but one that took full advantage of the experience and processes developed by Carbide and Carbon.

Generally, it requires seven to ten years for a company to take a process developed in the laboratory, put that process to test in a pilot plant, iron out production problems, design a full-size plant, and then actually build the

plant and go into mass production.

By working at top speed for twenty months—Carbide and Carbon telescoped research, development, engineering, and construction work that would have taken 10 years in normal times. In this short time laboratory research was translated through chemical engineering into larger and more modern facilities for producing the chemicals for synthetic rubber than existed anywhere else in the world.

This achievement could never have been possible had it not been for the years of research and experimentation which, prior to the emergency, Carbide and Carbon had devoted to the production of synthetic—or man-made—chemicals of the organic series.

Business men, technicians, teachers, and others are invited to send for the book "Butadiene and Styrene for Buna S Synthetic Rubber from Grain Alcohol" which explains what these plants do, and what their place is in the Government's rubber program.

BUTADIENE, (bew-ta-dý-een). A highly volatile liquid which is the principal chemical in the manufacture of Buna synthetic rubbers.

STYRENE, (stý-reen). A liquid, like benzene, but having the property of reacting within itself to form a solid, clear, plastic mass. It is used as one of the principal ingredients of Buna S synthetic rubber.

BUY UNITED STATES WAR BONDS AND STAMPS

CONSTRUCTION RECORD AT INSTITUTE

June 25, 1941



Carbide and Carbon submits definite production estimates.

July 31, 1941



Design work starts on 10,000-ton-a-year butadiene unit.

Aug. 22, 1941



Government authorizes construction.

Dec. 7, 1941



Pearl Harbor.

Dec. 15, 1941



Design "frozen" for 20,000-ton-a-year alcohol-to-butadiene plant.

March, 1942



Japanese occupy Malay Peninsula and Dutch East Indies; cut off about 90 per cent of U. S. natural rubber supply.

April, 1942



Construction on the first two 20,000-ton-a-year butadiene units starts at Institute, W. Va.

July, 1942



Construction of 25,000-ton-a-year styrene plant starts.

Sept. 10, 1942



Rubber Survey (Baruch) Committee report accepted.

Jan. 29, 1943



First large-scale, alcohol-to-butadiene unit goes into operation two months ahead of schedule.

Feb. 18, 1943



First tank car of butadiene from grain alcohol shipped from Institute plant.

April 7, 1943



First styrene unit begins operation.

May 25, 1943



Fourth 20,000-ton-a-year butadiene unit begins operation at Institute plant.

UNION CARBIDE AND CARBON CORPORATION

30 East 42nd Street UCC New York 17, N. Y.

Principal Products and Units in the United States

ALLOYS AND METALS

Electro Metallurgical Company
Haynes Stellite Company
United States Vanadium Corporation

CHEMICALS

Carbide and Carbon Chemicals Corporation

ELECTRODES, CARBONS & BATTERIES

National Carbon Company, Inc.

INDUSTRIAL GASES AND CARBIDE

The Linde Air Products Company
The Oxweld Railroad Service Company
The Prest-O-Lite Company, Inc.

PLASTICS: Bakelite Corporation • Plastics Division of Carbide and Carbon Chemicals Corporation

Capital Scenes... and What's Behind Them



Don't call him "common"

IF YOU had put a wet finger on the Senator he would have sizzled like a tailor's goose. He was just that hot. He said that he had wakened in a fair-to-middling good humor and had his morning coffee and picked up the paper—

"Satisfied, mind you, that the war was getting along and that Congress was old-fashioned and self-respecting again, like it hadn't been in ten years—"

Then his eye fell on a speech by one of our noblest characters, who talked mostly about the "common man" and the Senator said he blew up. He said a man who talked down to American citizens as "common men" was a snob, shallow-pated, underfed mentally and probably had ring-worm. He wouldn't trust that kind of man with the management of a screw lead pencil.

Other things are O.K.

APART from this grievance things seemed to him to be going along all right. The war is going to cost us more than we ever dreamed of, but that is all right. It made him think of the story they used to tell when he was a boy:

"A man was walking along the road and saw a big wildcat run in the open door of a farmer's house. So he ran to the barn and called to the farmer:

"I just saw a wildcat go in your house," he said, "and your wife is in there alone. What are you going to do about it?"

"The farmer studied awhile," said the senator, "and then said he wasn't going to do nothing about it. 'He got himself in there,' he said. 'Now let him get himself out.'"

He hears less inflammation

THE Senator said people are not jumping at each other's throats the way they were a little while ago. War has become our way of life for the time being. There was a time when any one who said one of our Allies did business in a business-like way was practically convicted of being a fifth columnist.

"Now we can look in at the show window without being blinded," he said. "We know now that the British have their legitimate interests to look after, and we are beginning to look after our own in the same way. Maybe not as well as we should."

He did not approve of any one who boasted that he has a sense of humor. Such a man usually cackles like a guinea hen, he said, and still has a bump on his head to show where he fell off the fence. But a quiet laugh does a nation good sometimes. Like the one Americans had when they read the lend-leasers had sent thousands of suits of longleg woolen underwear to the A-rabs.

We are talking turkey

THERE is the matter of oil. The British, he said, conserved their oil as best they could. All is understood and forgiven. American interests have oil in the same eastern latitudes, and as soon as we perceived that they are also conserving oil we ceased to be fiery about British conservation. Maybe both sides kind of ceased to be clabby for a little while. He wouldn't know about that:

"But business is just as much business with our Allies as it ever was," he said, "and like enough it is with us just the same way. It never lessened my love and admiration for my old mother to find out the roan colt she sold me used to cross his legs and fall whenever he hit a gallop. I never asked her anything about his galloping habits."

He understands that Congress will get right down to business about the lend-leasing business before the winter is over.

We'll want to know

CONGRESS, he said, is bound to find out a lot that has been kept secret about lend-leasing. He wouldn't be surprised if an old gentleman named Hull might be found in the background kind of egging it on.

"I could have told them," he said, "that nobody ever scared Cordell Hull away from the county fair when he was a mite younger than he is now."

Some of the more emotional folk tried to make trouble for Mr. Hull, said the Senator. "He is just as good a friend of Russia as any American should be. They said he was anti-Russian. If he did not want to pick up the dinner check whenever some young sprout of a prince or a kind of a duke or queen came to town, he was said to be anti whatever nation the sprout might belong to."

"Down in Tennessee, folks mostly work for their living. The Hulls never got used to having folks come to visit, and then go away with a shoat under an



arm. They're as hospitable people, the Hulls are, as ever tied a tincup to the whiskey keg. But there is a limit."

Hidden in the bigness

CONGRESS will not, he said, offer even the faintest objection to any gift or loan which is of value in the joint stock enterprise of whaling the Nazis and the Nips.

"But a lot of money has just leaked through incompetent fingers, and we're going to locate the fingers and give 'em a good paddyywhacking."

Not that any one will pay much attention. This war is so big that most anything may happen and we forget about it. The Senator said he could produce, on a bet, a dozen cases in which government bureaus refused to obey the orders of Congress. That was a dozen cases he, personally, knew about. He thinks that perfectly cockeyed things have been done in Lend-Lease. Honestly, mind you. But men go kind of queer when they have almost unlimited authority and little responsibility.

Nothing but a hunch

HIS HUNCH is, and it is nothing but a hunch plus some acquaintance with fact, that when all the returns are in, it will be found that Secretary of State Hull will have played a stiff hand in the tri-secretary conference:

"He's a poker player, is old Cordell. He's got a bland old face that is just as revealing as the back of a watch. Once Admiral Jerry Land held a conference with him and Jerry did all the talking. When he was through he kind of licked his whiskers and got up and said, 'Well, Mr. Secretary, I guess we understand each other now,' and the Secretary said, 'Hell, no, Jerry, you haven't told me anything I want to know and all you have to do is to answer one question.'"

That threw the Admiral's whole program into reverse. The Senator thinks it will be shown that our interests have been in perfectly safe hands.

Don't underplay Mother Russia

THE Senator said he understood that Admiral Standley came home from his ambassadorship in Russia a warm admirer of the Russians. He got along with them fine. When they began to get tough he began to get tough. They understand that system and they like it. If Stalin holered, Standley holered. If Molotov wanted to know:

"How about that second front?"

Standley could reply: "Listen, Kid"—in protocol language, of course—"who do you think you are?"

We have, it seems, a way of swearing and backslapping and grinning and buying drinks that is so nearly that of the Russkys themselves that no one can tell the difference. Gen. Patrick J. Hurley, cowpunch, coal-miner, soldier, was shown more than the Russians would have shown the Combined Chiefs of



Day Never Ends...

NORTH, South, East and West . . . the power of American locomotives is speeding the materials of war and fighting men . . . to end this war. Not a minute can be lost. For in that minute, men can die.

That's why day never ends at this engine terminal of the Norfolk and Western Railway, in Roanoke, Va. Here, modernization and peak efficiency have stepped up servicing capacity from 85 to 135 locomotives every 24 hours. All day and all night, these symphonies of steel and power roll into the terminal. By swift, assembly-line method, each locomotive is thoroughly inspected, serviced and rolls out again, at the rate of one every ten minutes . . . back into the battle of transportation.

The job of fast servicing and keeping American locomotives rolling is absolutely vital to Victory.

* * * * *

When Victory is won, the Norfolk and Western — operating between the Midwest and the Virginias and Carolinas, with lines North and South — will play an important role in promoting the peacetime progress of the nation and the strategically located territory it serves.

Norfolk and Western Railway

ONE OF AMERICA'S RAILROADS... ALL UNITED FOR VICTORY!
BUY MORE WAR BONDS



Staff. He bounced them into it. Standley says the Russians have everything—men, power, minerals, land—and like to play with Americans. He thinks Averell Harriman will do well over there.

Why did Standley come home?

THE Admiral was asked why, if he liked Russia so well, and thinks we should play inside croquet with the Russians in a business way in the years to come, he ever came home?

"Hell," said the Admiral. "It was so damned cold."

Sign of the times

ONE of the signs that we are adjusting ourselves to the present and whatever may be ahead of us is provided by the Interdepartmental Chemical Statistics Committee. This is made up of representatives from the government bodies that have to do with chemicals:

"Our business men must be given more information," was the informal conclusion of the committee at its recent formal meetings.

"If they are not told where and what to sell, what population movements will be, where to get the raw stuffs, they cannot make plans."

One member said our business men will be all dressed up and have nowhere to go. "If they cannot make sound plans, another boom movement in depressions will be started."

"But the Army and the Navy and some of the war agencies will not release this vitally needed information."

The kind squire complex

THE committee agreed that no harm would be done if this information were given the business men. Enemy countries could not work any harder if they knew what Americans are doing. They are working now as hard as they can. Explanations given for this refusal of vital information by the Government are that:

1. Some government men are still in the Good Squire coma. They want to do the planning for business. If business had the statistics it is clamoring for, it would make its own plans.

2. The military mind objects to the release of any news.

3. Failure to realize the importance.

4. Sheer inertia of some government bureaus.

The Senator thinks Congress will make the bureaus loosen up.

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The long, long trail

WHEN Italian resistance collapsed, the government bureaus were deluged with demands for illuminative statistics. Too many business men thought the war was nearing its end:

"We will really be getting under way in the summer of 1944," is the report of military men.

The attack on Germany by whatever route is selected must be in overwhelming power. The presumption here is that more than half the weight and men will be American. England will play her full part, but English losses have been heavy and her resources are not so great. To put into the field a combined army of 5,000,000, complete with guns, provisions, hospital facilities, rolling stock and the innumerable heavy items that go to the making of an army, may require a year's time. No light-weight effort will do the trick.

Some qualifying possibilities

NO military authority counts on a break in German morale. But it may come.

Our air force may so crush resistance that it cannot be continued. But the staffs think Germany can be smashed only by the foot soldiers, no matter how devastating are the air blows.

The small conquered countries might throw out their conquerors. But they lack arms and organization and their strength is waning.

Russia might tear right through to Berlin. But Russia might go just far enough to negotiate a peace on her own.

The Germans might follow their age-old plan and quit in time to keep hostile armies off their soil.

And the peace treaty?

MEANWHILE, say these military authorities, the political chiefs are being compelled to face up to the fact that only while the Allies continue to fight together, can they hold together:

"The conclusion is they will go on fighting together until some workable plan can be arranged."

The British want to hold the royal families on their thrones. The soldiers of the Mississippi Valley want to get back to their plows. Russia does not want to smash Germany. British and American chiefs think future safety can only be secured by making Germany powerless.

The smaller United Nations want the German market restored. The Dutch suffered greatly and have fought nobly, but will the Dutch be given back their world monopoly of quinine production? If Russia insists on taking the Baltic states, will Great Britain say no?

If we get mixed in that debate we are in Power Politics up to our ears, no matter what to say. Meanwhile we still have to k.o. the Japs. What will our future trade relations be?

Until these questions are settled, we must continue to fight, the military men say. A Peace Table at which these inter-allied problems appeared would finish in a brawl.

Don't be down-hearted.

Herbert Covey



PAPER DIRECTS THE ASSAULT

It has been said that paper wins wars... that an army fights with paper. No scheme of strategy...no single skirmish was ever launched without careful planning in advance... on paper.

But carefully-charted plans are only a small portion of the part that paper plays in the vast war picture. Think of the *maps*! In December, 1941, the Army shipped from Washington 530,000 maps. In June, 1942, 3,100,000! In a single six-month period, shipments averaged *six million maps* per month!

Beside the paper used for maps, *half a million tons* of paper were consumed this year to make the "V-boxes" that carry food and ammunition overseas. Paper camouflage saves soldiers' lives. There are thousands of other uses which

make paper a vital war essential.

With this unending need for paper in the war, it's no wonder that this country is plunging headlong toward a paper shortage. For this year the United States and Canada can produce *only three-fourths* as much paper as they produced in 1942. A man power shortage in the woods is responsible for this.

These facts demand that we *waste no paper*. And to use less paper is even more important. For the paper we *do not use* conserves both labor and material. All types of paper can be salvaged, excepting that which is waxed, oiled or tarred. Use as little *new* paper as you can. These are acts of patriotism that help to speed an Allied victory... that help to save American lives.

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Where Jobs Will Be Wanted

THE postwar demobilization problem will inevitably be more severe in some states than in others. Temporarily, at least, Michigan, for instance, with its converted automobile industry, will have an estimated six ex-servicemen or idle war workers for every ten persons employed in the state in 1940. In other states, postwar unemployment may be as low as 19 per cent.

In an effort to determine the relative severity of the problem in the various states, the Bureau of Labor Statistics has prepared an estimate in which the number of 1940 jobs is balanced against the total number of persons to be demobilized when the war is over.

The group of demobilized persons will include members of the armed forces, who may be expected to return to the state, as well as industrial workers who will lose their jobs as war production is curtailed.

The estimate depends on four assumptions which are not intended as predictions but do provide a basis for a preliminary analysis:

1. That the war will be ended both in Europe and Asia by December, 1944, at the peak of the war production effort.
2. That the United States will maintain an armed force of 2,500,000 in the early postwar years.
3. That war production will be rapidly curtailed to the level of postwar defense requirements.
4. That industrial reconversion and expansion to high levels of civilian production will proceed as rapidly as physical and technological factors will allow, with no delays caused by financial difficulties or uncertainty of markets.

In presenting the results of the study, both in the form of a map showing the broader aspects of the demobilization picture and a table giving more complete details, Emile Benoit-Smullyan of the Bureau's Postwar Division, points out:

"Three general comments are relevant. First, in no state is the problem negligible. A sudden expansion in the labor supply of only one-fifth relative to normal labor requirements is enough to cause serious disturbance unless foreseen and prepared for. Sec-

Military and Industrial Demobilization, Related to Pre-War Employment

STATE	Number of persons (in thousands)			Demobilized persons as percent of 1940 employment	
	1940 employment ¹	Demobilized persons			
		Armed forces	Industrial workers		Total
United States ²	45,166.0	8,500.0	6,070.0	14,570.0	32.3
Alabama	893.8	172.6	88.6	261.2	29.2
Arizona	150.2	32.3	1.1	33.4	22.2
Arkansas	583.9	118.2	16.0	134.2	23.0
California	2,525.3	482.0	577.6	1,059.6	42.0
Colorado	349.7	70.6	22.4	93.0	26.6
Connecticut	680.5	113.0	218.5	331.5	48.7
Delaware	102.6	17.9	17.3	35.2	34.3
District of Columbia	308.9	50.2	21.7	71.9	23.3
Florida	683.3	125.0	30.3	155.3	22.7
Georgia	1,107.4	196.4	49.6	246.0	22.2
Idaho	158.6	34.0	.2	34.2	21.6
Illinois	2,874.4	523.6	390.2	913.8	31.8
Indiana	1,151.7	214.2	304.3	518.5	45.0
Iowa	862.8	153.8	40.4	194.2	22.5
Kansas	583.8	108.8	111.0	219.8	37.6
Kentucky	847.6	172.6	22.0	194.6	23.0
Louisiana	771.1	152.2	53.1	205.3	26.6
Maine	279.0	49.3	35.0	84.3	30.2
Maryland	690.9	125.0	165.5	290.5	42.0
Massachusetts	1,534.8	266.9	223.2	490.1	31.9
Michigan	1,825.0	350.2	717.7	1,067.9	58.5
Minnesota	931.5	176.8	35.8	212.6	22.8
Mississippi	727.5	131.8	18.2	150.0	20.6
Missouri	1,297.1	232.9	122.2	355.1	27.4
Montana	185.6	36.6	2.2	38.8	20.9
Nebraska	433.4	79.9	18.0	97.9	22.6
Nevada	41.5	8.5	1.5	10.0	24.1
New Hampshire	176.0	29.8	18.4	48.2	27.4
New Jersey	1,569.1	281.4	327.8	609.2	38.8
New Mexico	140.3	33.2	.3	33.5	23.9
New York	4,974.5	913.8	500.1	1,413.9	28.4
North Carolina	1,208.7	225.2	22.6	247.8	20.5
North Dakota	200.4	40.0	.1	40.1	20.0
Ohio	2,345.0	440.3	506.0	946.3	40.4
Oklahoma	658.7	145.4	46.1	191.5	29.1
Oregon	389.8	70.6	58.5	129.1	33.1
Pennsylvania	3,230.2	639.2	579.3	1,218.5	37.7
Rhode Island	264.7	45.9	48.4	94.3	35.6
South Carolina	661.1	115.6	20.0	135.6	20.5
South Dakota	204.5	39.1	.2	39.3	19.2
Tennessee	941.7	181.0	51.2	232.2	24.7
Texas	2,138.4	423.3	140.7	564.0	26.4
Utah	148.9	34.0	19.7	53.7	36.1
Vermont	125.1	21.2	4.8	26.0	20.8
Virginia	933.1	175.1	92.3	267.4	28.7
Washington	607.7	115.6	158.9	274.5	45.2
West Virginia	519.1	119.8	37.0	156.8	30.2
Wisconsin	1,060.8	198.0	134.9	332.9	31.4
Wyoming	86.6	17.8	0	17.8	20.6

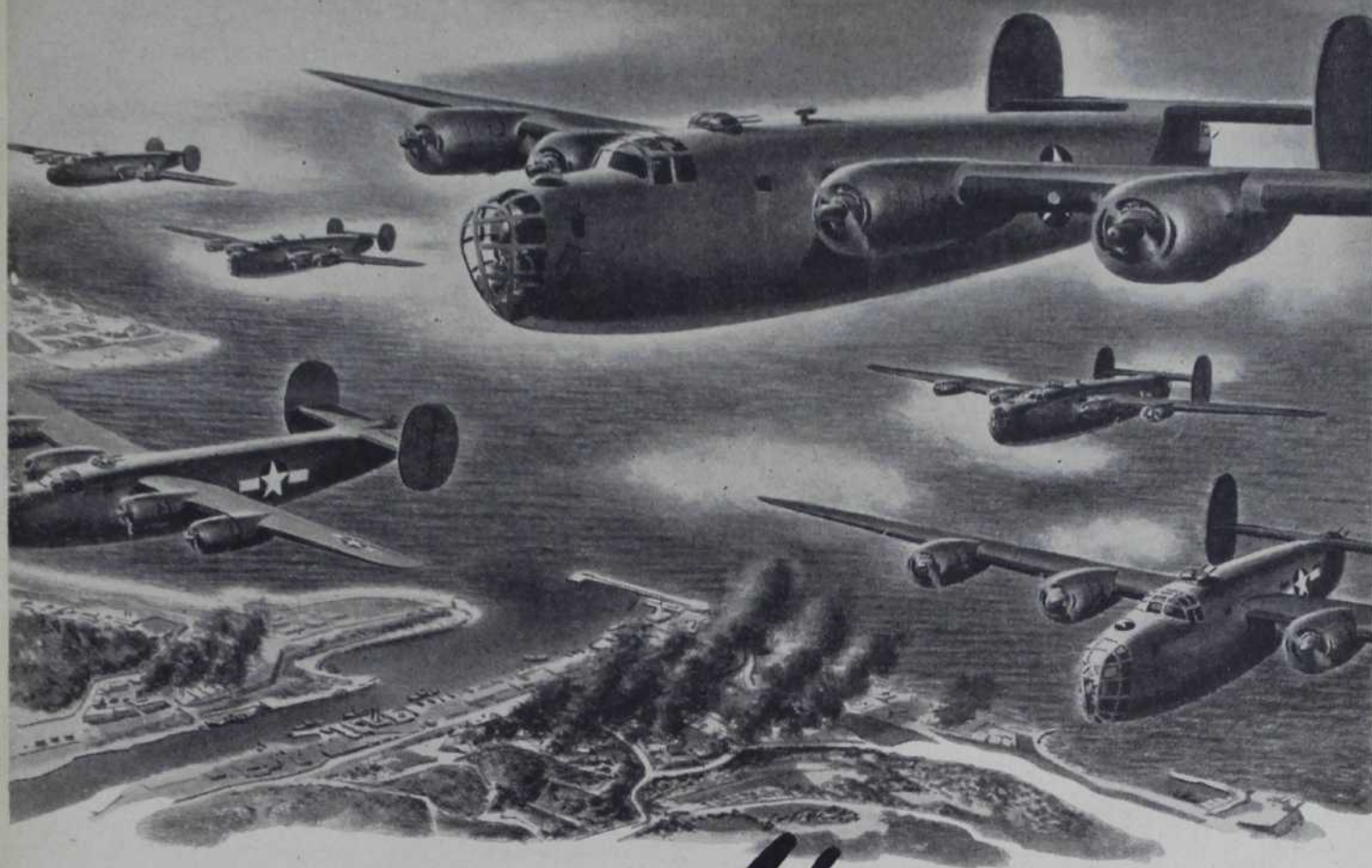
¹From 1940 Census of Population.

²Differences between United States totals and sums of State components are due to rounding of figures.

FROM THE "MONTHLY LABOR REVIEW"

ond, the gravity of the problem for each state will depend chiefly on the expansion of the industrial base during the war, since the demobilized servicemen will constitute a fairly constant proportion of the population and of the prewar employment in each state. Third, even where the problem is not acute over the state as a whole, there may be local dislocations for which preparation will be necessary....

"It should be noted that the figures on industrial demobilization minimize the actual reemployment problem in the sense that they do not include job shifts within a given industry which produce no net contraction of employment. It should also be observed that all demobilization figures are totals for the reconversion period as a whole and do not measure unemployment at any particular time."



Softening Up

THE INVASION FRONTS



Norden Bombsights

Burroughs is manufacturing and delivering the famous Norden bombsight—one of the most delicate and precise mechanisms ever devised.

Precision-built accounting and figuring machines are also being produced by Burroughs for the Army, Navy, U. S. Government and other vital war activities.

The softening up process is carried out in devastating patterns of bomb bursts, planted with precision by deadly aircraft. They undertake destruction of enemy capacity to wage war, by striking ceaselessly—allowing no respite, no opportunity to rebuild, no future but futility and defeat.

Incessant, heavy bombing requires countless preliminary hours of planning and figuring to keep at flood tide the flow of fuel, supplies, spare parts, bombs, bullets, clothing and food on which success depends.

To cope with this tremendous volume of figuring, Burroughs machines by the thousand are producing fast results that expedite the work, accurate results that meet the rigid requirements of war.

BURROUGHS ADDING MACHINE COMPANY • DETROIT

Burroughs

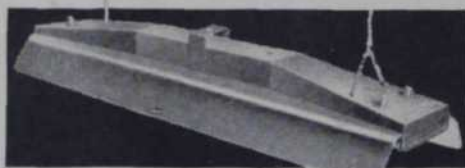
**It Takes LIGHT
to See Things
RIGHT!**



**In War
Production,
Too!**



**Guth SUPER
ILLUMINATOR**
U.S. PAT. REG. & PAT. PENDING



FLUORESCENT LIGHTING for Good Illumination

For lighting that's efficient, modern, and scientific, investigate the new GUTH SUPER-ILLUMINATOR. It's an engineering feat in fixture-design which conforms to all W.P.B. metal limitations—without sacrificing strength, rigidity, or durability!

The Top-Housing is die-formed from a single sheet of steel. It has added strength—extra good looks—but costs no more than ordinary fixtures!

Another New GUTH Achievement in Fluorescent Lighting!

GUTH QUICK-LITERS are identical to SUPER-ILLUMINATORS except that they are built with special ballasts, perfected for speedy, efficient action. Quick, positive starting—without the use of Starter Switches! Lower operating costs! Tested in use over a year—approved by users everywhere!

W. P. B. urges good lighting for War Industries. If you are doing War Work, you are entitled to new Fluorescent. See your nearest Electrical Wholesaler for details.

Write or wire collect. Representative will call with actual samples to demonstrate superiority of these GUTH Fluorescent Fixtures.

The EDWIN F. GUTH
COMPANY
2615 Washington Ave.
St. Louis, Mo.

Guth

"LEADERS IN LIGHTING SINCE 1902"

Piscatorial Solomon

(Continued from page 36)

and resonant. His eyes twinkle with friendliness. He has a dimple in either cheek. His appetite is comprehensive. He eats everything and likes it. He likes to lean back in his swivel chair. This posture maligns his figure, for a good share of his weight is carried around his shoulders. He is an out-of-doors man who likes to fish and hunt, although he bars big game.

Grew up in small town

IN HIS youth he lived in a small town in Iowa. "One street light and four Democrats." His first ambition was to make a collection of birds' eggs. The development of that early hobby made him in 1940 the Director of the new Fish and Wildlife service in the Department of the Interior, which had taken the Bureau of Biological Survey from the Department of Agriculture, and the Bureau of Fisheries from the Department of Commerce.

In November, 1935, Ira Gabrielson was made Chief of the Bureau of Biological Survey, and became Director of the Fish and Wildlife Service when Secretary Ickes combined the divisions in 1940.

By the middle of 1942 the war had thoroughly disorganized the commercial fishing industry. Other industries have organizations competent to present rebuttals to the Government but the fishermen have none.

The various unions do not operate in concert. The big companies have fleets, wharves and canneries and are in vigorous competition. Before the war, fish auctions were held on the wharves of the great New England fishing ports—Boston and Gloucester—and the first vessel in from a cruise got the best price. The one-boat captains raced to the independent wharves.

The independent canneries fought each other and the big-company canners. Even the individual fishermen were free as air. They tried to sign on with captains who had the name of being lucky, or for carrying sail longer in a blow. They might jump a ship if they did not like the cook's pie.

There was a sound economic reason for this.

Fishermen work on the oldtime Yankee share plan. Each crew member gets one share of the catch. The captain gets three shares. The mates and the cook rate somewhere between. Under the pressure of war, the price of fish went so high that some captains

made from \$1,500 to \$2,000 a month and a lone fisherman might get \$500 or \$600.

When the war interfered with them, the fishermen had pockets full of money. Some of the vessel owners were so irritated by conditions that they threatened to tie up their ships for the duration. Some of the fishermen took war industry jobs. They might not make as much money but neither were they cold and wet.

Something had to be done to bring order out of an advancing chaos. The President named Secretary of the Interior Ickes as Coordinator of Fisheries. No money was provided, however, and Mr. Ickes was compelled to take funds from the Fish and Wildlife Service. As chief of that service, Gabrielson was a natural for deputy coordinator.

He had been 29 years in the wildlife business.

He was born on September 27, 1889, in Sioux Rapids, Iowa, where his father played a minor part in politics. In those days boys in Iowa could go birds'-nesting. They were on familiar terms with watersnakes and raccoons.

Most of them work through this phase of juvenescence. However, by the time the young Gabrielson had grown old enough to know that there is such a science as biology, he knew that would be his life. He graduated from high school with reasonable honors—the score would have been better if he had been examined on muskrats and squirrels—and became a student at Morningside College in Sioux City. He worked a part of his way through college:

"Every one did. No one thought anything about it."

In 1912 he graduated with the degree



**"By the way, who's carrying the
insurance on your overshoes?"**

LOOK SOUTH
LOOK AHEAD



Good Fortune

There's good fortune in these "lines."

For these are the lines of sturdy, shining steel... the lines of the Southern Railway System... that criss-cross the broad strong palm of America's Southland.

They are *fighting* lines today, humming with cargoes that are helping to speed final Victory. Oil and timber... jeeps and tanks... bread and beef and bullets for America's fighting men.

But these busy Southern Railway lines will not always be dedicated to the grim tasks of war. A brighter day is ahead for all... when the wealth and riches of

a stronger, greater Southland will add to the security and happiness of free men at Peace.

New products will come from Southern research laboratories. New abundance will be yielded by fertile Southland farms and fields. New and better things will pour from the South's modern factories.

And they will flow over the stout steel lines of the Southern Railway System... bringing good fortune to the South and to all who share our hopes for the future.

Ernest E. Harris

President

SOUTHERN RAILWAY SYSTEM

The Southern Serves the South

MARCHANT

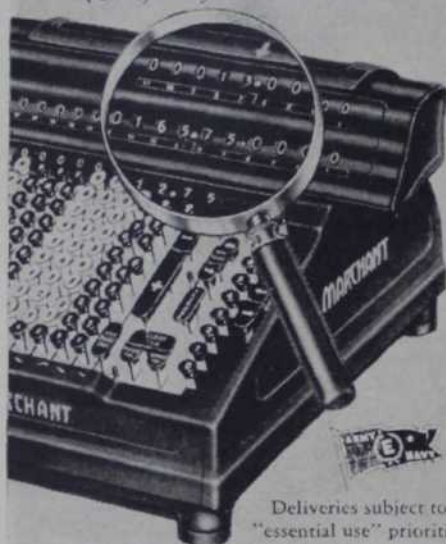
First

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FIGURE DIALS

FOR ALL 3 FACTORS

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The Art of Calculating as advanced by Marchant

Figure dials for all 3 factors of multiplication were first introduced to American calculators by Marchant over 20 years ago.

Today, those who know calculators best regard this exclusive Marchant feature as essential to complete calculator satisfaction.

ALL 3 FACTORS stand in full review upon completion of every Marchant multiplication... showing at a glance a complete dial proof of correctness, with each amount properly pointed off by decimal.

This eliminates the usual inefficient eye-straining and time-consuming zig-zag hunt through 90 keys to check a factor.

Figure Dials for all 3 factors is one of 20 Points of Superiority by which Marchant brings speed, accuracy, and good nature to all calculator work.



Marchant Calculating Machine Company
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of A.B. and what further knowledge of biology he had been able to pick up. He married Miss Clara Speer, who had been a student in the State Normal School. It was a boy-and-girl romance but the Deputy Coordinator confesses that he is "kinda fond of her yet."

A wife must be supported and for three years he taught in the Marshalltown high school.

He did not like that, because he is, and was, an out-of-doors man, and teaching is a confining profession. The first of the four Gabrielson young women was born. Gabrielson won a fellowship in the University of Iowa, "enough to keep us going"—and gave up his school teaching to go again to college.

First job: \$75 a month

SOMEONE told him that a \$75 a month clerkship in the Biological Survey in Washington could be had and he consulted his instructor in biology:

"You'd better take it," the professor advised. "You will learn more than I can teach you and you'll be paid as you learn."

This was in 1915. For a time he dissected little animals and looked into the content of bird stomachs to see whether they lived on crops or pests. He was sent to Oregon and North Dakota to help control the rodents; became the regional supervisor in 1931, and three years later was made the directing head in the Pacific area of the new Division of Game Management. Much of his time was spent in the field. All of his time, in fact, that he could spend there. It was a lovely life for a man who not merely liked to hunt and fish but was enormously interested in game problems.

He rather regretted his assignment to Washington as consulting specialist in the Biological Survey and Assistant Chief of the Division of Wildlife Research. However, he still spends at least half his time in the field. Between times he wrote 250 papers on birds, mammals, and ornithology. In recognition of these contributions Oregon State College made him Doctor of Science in 1936. He has never learned to play golf:

"Poker? Uh-huh. But I'm poorer at it than the average."

Little by little order is being restored to the commercial fishing industry. No one can say whether production will be restored in 1943 because no one can predict safely what may happen in the war.

About a dozen fisheries provide three-fourths of the nation's total catch. Salmon, sardines, tuna and mackerel are the big four of the canned fish trade; menhaden, herring and pilchard provide the by-products business; and haddock, salmon, rosefish, cod, flounders and whiting are among the vitally impor-

tant fresh fish supplies, together with shrimp and oysters.

About 4,500,000 cases of pilchards—California sardines to you—will probably be produced in 1943. Only about 40 per cent will reach civilians and the rest will go to the services and on lend-lease to our Allies.

Normally 500,000,000 pounds of menhaden are landed. This goes to fish meal and oil and is mostly used for feeding poultry and hogs.

Alaska salmon fisheries have yielded a considerably larger pack than last year. More boats are available—thanks to the change in Japanese prospects in Alaskan waters—and the cannery operations have been confined to about 75 of the larger and more efficient plants. The interests of the smaller plants have been protected by a sharing arrangement.

Tunas provide an annual catch of about 160,000,000 pounds. When the military services took over the fast refrigerated tuna clippers—the finest fishing boats in the world—the industry was left without means to reach the most productive fishing grounds near the Equator. By straining its resources to the utmost, the industry has caught more tuna this year than last. Some of the fast boats have been returned. The entire pack made during the latter half of 1943 will be released through ordinary trade channels except for the Army orders previously placed.

The fifth in rank of American fishes are the mackerel, which provide an annual pack of 1,000,000 cases in a good year. It has suffered from the same lack of boats and men as the other fish industries.

The hardest hit of all is the New England ottertrawl fishery, which has dropped to four-fifths of last year's level. A large ottertrawler will land 5,000,000 pounds in a season of the staple varieties in the fresh fish business.

It may be that 760,000,000 pounds of canned fish will be produced this year,



"How's business? I haven't been in business for months! I just fill out Government forms"

of which 312,000,000 will be salmon, 202,000,000 of sardines, 178,000,000 of tuna, mackerel and herring, and 30,000,000 of other varieties, and 38,000,000 pounds of shellfish.

Because of wartime needs the Army, Navy and Coast Guard took more than 700 of the larger, newer and more productive fishing craft from the total fishing fleet of 5,563 large boats and 70,000 smaller boats. On these boats, 125,000 men make a living, and thousands more work in the canneries and on the wharves. The annual catch, including the 110,000,000 pounds of fish caught in the Great Lakes, is marketed for approximately \$200,000,000 at wholesale levels. The retail selling price can only be guessed at.

Ships may be built

MANY of the requisitioned vessels have been returned to the fisheries, although they will be retaken if the submarine threat again becomes formidable along American shores. The Coordinator's office has obtained material allotments for the construction of 258 vessels. The materials may not be procured and the vessels may not be built, because the needs of war are only to be dimly foreseen. However, the allotment is an evidence that seafood is regarded as an invaluable contribution to the lessening stock of food.

The fishermen are bedevilled by the shortage of hard fibre rope and twine and nets. The Japanese control the sources of the hemp and the Army and Navy are fond of nets for camouflage purposes. Diesel engines and parts are now available in limited quantities and the manpower problem is less acute than it was a year ago. This is a variable, of course, and more men may be taken from the fisheries and wharves at any moment. Meanwhile, the fish shortage has had some unexpected collateral developments.

Not so long ago shark meat was thrown away after the livers had been taken for the sake of their vitamin-rich oils. The Coordinator's office told in press releases that shark is good to eat—providing blueprints of the cooking methods—and shark suddenly became a food fish. Perhaps this is a better testimonial to the power of advertising than to shark filet à la Gabrielson.

Many varieties of excellent fish had been refused by the American housewife merely because they were unknown. They have been unknown because they ran in small schools and were not worth the attention of the wholesale fishermen. Now they are called for by epicures. Whale meat as prepared by the Norwegians is a delicacy, and whale steaks are fairly comparable to grass fed beef. The country went wild over vitamins—shark liver provided plenty of oil—and the price went out of bounds. The soup-fin shark of the Pacific Coast has a disproportionately large liver which sells for about \$6 a pound (\$9 in 1941). One boat in four days made a catch of soup-fin sharks worth \$18,000.

That seems to be a good end for a fish story.

OIL— The Bloodstream of War!



Out of the rich earth of America, the mighty oil industry draws over four million barrels of crude oil each day—more than enough to fill the "Big Inch" Pipeline stretching from Texas to New Jersey.



Lubricants and fuels safeguard machines and engines, cool high-speed cutting tools, turn great turbines that light and power mill and factory—speed production of war goods.



Synthetic rubber, to keep our home and fighting fleets rolling, is made largely from a pure chemical derivative of petroleum, Butadiene—the most important constituent of Buna rubber.



Insecticides and drugs developed from petroleum, combat war's diseases and infections. Petroleum antidotes against the ravages of health and life are a vital force in the bloodstream of war.



Transported by tanker, tank car and pipeline to huge refineries, the crude oil is distilled or "cracked" and its multiple derivatives poured into the bloodstream of war.



Super Octane gasoline, incomparable achievement of the American petroleum industry, is being produced in fantastic quantity to provide command of the air for countless Allied bombers and fighters.



Safeguards for amphibious operations—special oils, waxes and greases shed water, help prevent the corrosive action of salt air, heat and moisture, and protect equipment, as well as guns and munitions.



Explosives, made with a petroleum chemical known as Toluene, signify the most direct, deadly use of oil as ammunition. Toluene makes T-N-T. T-N-T makes the enemy R-U-N.

Cities Service takes pride in being a vital part of the vast industry which supplies these essentials of war to our fighting forces on the home and battle fronts.

OIL
IS AMMUNITION —
USE IT WISELY !

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SHREVEPORT, LA.

Minds Are Still on the Gold Standard

By LELAND LOVELACE



The Gold Act had changed the aspect of his find. The cowboy buried the chest again

IN A recent newsreel, produced to inspire civilian cooperation, an official spoke earnestly on the need for saving strategic materials:

"They are more precious than gold."

Presumably whoever wrote that script saw nothing paradoxical in the use of such a simile before an audience which has been told for years that gold is no longer precious—or at least that it is not money.

A few hearers, however, found mild amusement in this informal statement of a truth that many governments have formally denied—the fact that, in spite of government edict, the world's peoples are unable to divest their consciousness of the long inherited thought that gold is wealth; that gold is money, and can be spent for all those things the Bible mentions as being "added unto you," after seek-

ing for the kingdom of righteousness.

Efforts to change that point of view lead to amusing complications.

The western states, where gold is plentiful, are rife with stories and legends of lost gold and buried treasures. Constant search for them goes on, and now and then one is rediscovered.

A cowboy had been searching for years, as a hobby, for a legendary chest of gold, buried long ago at the foot of an Arizona mountain by a wagon-train of pioneers beset by Indians. Recently he found it, a cache by his description containing about \$30,000 in old gold coin.

Some day he'll be rich

BUT alas! the Gold Act of 1934 had changed the aspect of his find. The cowboy again covered the chest. In a nearby village, he asked advice from a man who has spent 35 years pursuing lost gold and buried treasures and writing of them.

"I don't want to do anything wrong," the cowboy said, "and I know it's not lawful now to have gold money. What shall I do?"

"I can only tell you," the man told him, "to take the money to the bank. Maybe they will allow you the value of a part of it. If they do, you must then report your portion of it for income tax."

The cowboy went away somewhat dubious and downcast. In a few days he returned.

"I've been studying over that money in the chest," he said, "and I've decided to 'leave her lay.' Someday gold will be legal again. Then I'll take it."

The gold money is still where the pioneers concealed it.

It does not matter so much to treasure hunters that gold certificates are unlawful. A law of nature which cannot be repealed takes care of the

certificates—nature has not made paper as permanent as gold.

Not long ago, Henry Pfeiffer and Carlo D. Cosmo, of Prescott, Ariz., found the lost fortune they had spent 20 years hunting, only to have it turn to dust in their hands. Where they expected to find about \$100,000 in gold or silver, they found paper money which disintegrated when exposed to the air. Pfeiffer told the story:

Many years ago, an old Frenchman was postmaster at a small trading center, about 40 miles west of Wickenburg. Along with the post office he had a store which made him considerable money. No bank being available, he buried it—about \$100,000.

The years passed. In 1906 his wife was taken to a Los Angeles hospital. When it was evident that she could not live, her husband was sent for.

The Frenchman and an old Indian servant reached the hospital too late. The shock was too much for the husband. He suffered a fatal heart attack.

The old Indian did not return to Arizona but finally he told an Italian miner about the money. Failing to locate the village, the miner in turn told his friend Cosmo.

After 20 years, Cosmo and Pfeiffer found the old trading post. Only the stone portions of the buildings and the heaviest timbers remain today.

The money was in a hole, 30 inches long, 14 inches wide, and not more than a foot deep. The bottom had been carefully lined with newspapers; the currency, neatly stacked, wrapped in papers and securely tied, was then laid in. On top were more newspapers; then a board; then some soil; a slab of concrete two inches thick; a layer of tar paper; more soil; some stove-



The puzzled prospector had to change his gold to silver to pay his taxes

pipe, cut and laid flat; and then more soil.

"When we struck the concrete," said Pfeiffer, "we were sure the fortune was ours. But when we saw the parcels, we were mystified. We expected gold or silver. You could see the mark of the string which had tied the bills together. But the rain had soaked the money. Alternate soaking and drying had ruined the paper."

When the gold act of 1934 was two years old, a little old man went into the county courthouse in Denver and offered a \$10 gold piece in payment of his taxes. Compelled to refuse the money, Dan Horan, the chief clerk, took him to the mint where his gold was exchanged for newly minted silver. The puzzled old man then paid his taxes and went away with his receipt.

"The man didn't know the least thing about anti-gold-hoarding," said Mark Skinner, superintendent of the mint, "and we will take no action."

Last year, a solid gold necklace, a priceless art treasure found in the tomb of a pharaoh, was stolen from the Egyptian Museum in Cairo. Did the thief value the "priceless art"? Not likely. To him, no doubt, the gold was money. Gold is money everywhere.

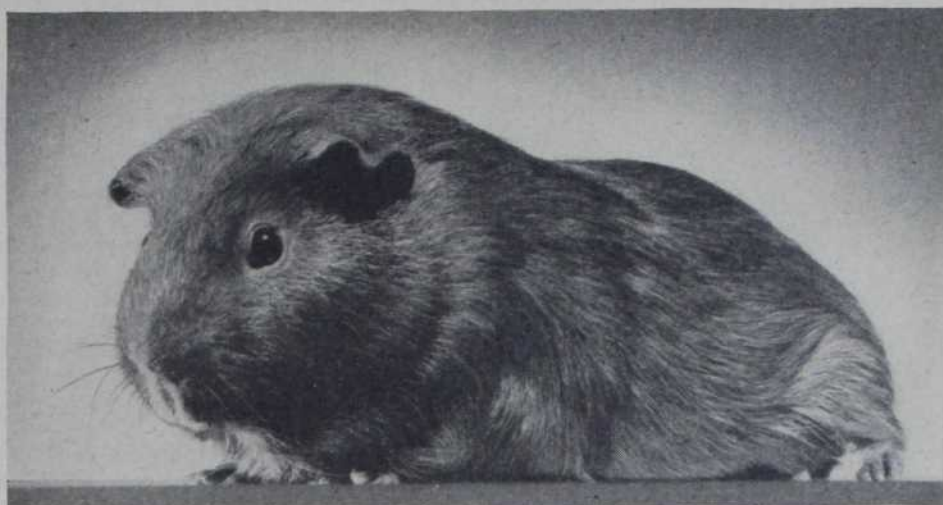


Canadian Aid

THIS label appears on all shipments of war supplies sent by Canada to the United Nations. In the center is a maple leaf in red and yellow; and on the border, the word, "Canada" (in English, Russian and Chinese) in blue on a yellow background.

Canada's financial aid to her allies since the start of the war includes: a gift of \$1,000,000,000 in war supplies to Great Britain—and through her—to Russia and Empire countries; \$700,000,000 in official repatriation of Canadian securities held in Great Britain; an interest free loan of \$700,000,000 to Great Britain; repurchase by Canada of munitions plants valued at \$200,000,000 built by Great Britain in Canada; commitments of \$341,000,000 for the Royal Canadian Air Force in England; and a current appropriation of \$1,000,000,000 for war supplies for the allies.

Guinea pig who "knows his apples" . . .



works for growers who ship . . .



enough apples to make 158 million pies . . .



over the Main Street of the Northwest!

Out in the Pacific Northwest they feed guinea pigs apples to determine vitamin content and measure vitamin value and potency. These experiments, conducted by university laboratories, have scientifically proven the high dietary value, and popularized the use, of Pacific Northwest Winesaps, Delicious, Jonathans, Rome Beauties, Yellow Newtons and other varieties world-famous for color, size and flavor.

REMEMBER INTERNATIONAL APPLE WEEK—OCT. 23-30

From the fertile Yakima Valley and other orchards in Washington, from Oregon, Idaho and Montana, comes one-fourth of the entire United States apple crop—30,000,000 boxes. Each year hundreds of carloads of these apples—enough to make 158 million luscious apple pies—roll swiftly and safely to market over the Northern Pacific Railway, Main Street of the Northwest.

NORTHERN PACIFIC

MAIN STREET OF THE NORTHWEST



This may or may not be an accurate conception of the taxi of the future. We do know this, however—Ohmer Taxi Meters have been used on taxicabs since 1915. They have been con-



stantly improved to fit the changing needs of taxi operation.

Today, they are serving on thousands of America's busy cabs, while the skills and facilities that went into their manufacture are fully devoted to war work. It therefore stands to reason that tomorrow's cabs—whether they serve on land or in the air—will be equipped with modern Ohmer Taximeters.



In the future, as in the present and the past, when you call "Taxi!" the chances are you'll be served by a cab equipped with an Ohmer. Ohmer Register Company, Dayton 1, Ohio.

OHMER

CASH REGISTERS for every type of retail store
FARE REGISTERS and TAXIMETERS for transportation
TOOL CONTROL REGISTER SYSTEMS for industry

Who Shall Risk Your Savings

(Continued from page 26)

Competition breaks up and distributes this power under the private credit system, Mr. Wiggins points out.

When members of the American Bankers Association selected Lee Wiggins to direct their battle on behalf of the private credit system, they chose a man whose viewpoint is that of a borrower, not a lender; that of a business man, not a banker.

He is a merchandiser by nature, a banker by chance. His first job was in his uncle's print shop, when he was 12. That was 40 years ago. His flair for merchandising enabled him to graduate from the University of North Carolina with his education paid for, and \$1,000 in profit.

Within the next ten years he became managing director of a department store serving both the retail and wholesale trade in the flat, fertile Pee Dee valley in northeastern South Carolina, publisher of a weekly newspaper in Hartsville, treasurer of a large seed producing and distributing firm, and a director of the Bank of Hartsville.

In 1932 the bank president died. The directors met to elect a successor. "Lee," said a fellow board member, "you've had more experience borrowing money than any of the rest of us. In fact, you've borrowed enough that you ought to know how to run a bank."

The board agreed, and Lee Wiggins was elected president of the bank, a position that led him into the struggle between state and economic forces for control of credit that has been flaring up periodically since the nation was founded.

"The way I see it is this," he says. "The credit structure is the key to the entire economy, and there is where we must take our stand to preserve freedom."

"Once the credit system becomes an agency of the Government, then it is quite obvious that government can control industry and all other business and commerce."

"Credit is the life blood of business. There should be no monopoly of it, whether the monopoly is held by the Government or by big business. The re-

How the Government Lends

HERE IS A LIST of American federal government agencies which are active today in the credit field:

- | | |
|---|--|
| Central Bank for Cooperatives | Federal Savings and Loan Insurance Corporation |
| Commodity Credit Corporation | Federal Works Agency |
| Disaster Loan Corporation | Home Owners Loan Corporation |
| District Banks for Cooperatives | Reconstruction Finance Corporation |
| Electric Home and Farm Authority | Mortgage Company |
| Emergency Crop and Feed Loan Section | Federal Public Housing Authority |
| Farm Credit Administration | Defense Plant Corporation |
| Farm Security Administration | Defense Supplies Corporation |
| Federal Credit Unions | Export-Import Bank of Washington |
| Federal Crop Insurance Corporation | Federal Deposit Insurance Corporation |
| Federal Farm Mortgage Corporation | Federal Reserve Bank Loans to Industry |
| Federal Intermediate Credit Banks | Metals Reserve Company |
| Federal Land Banks | Navy Department—Regulation V War Loans |
| Land Bank Commissioner Loans | War Department — Regulation V War Loans |
| National Farm Loan Associations | Reconstruction Finance Corporation |
| Product Credit Associations | Rubber Reserve Corporation |
| Production Credit Corporations | Smaller War Plants Corporation |
| Puerto Rico Reconstruction Administration | United States Commercial Company |
| Regional Agricultural Credit Corporations | United States Postal Savings System |
| Rural Electrification Administration | War Damage Corporation |
| Federal Home Loan Bank System | Inland Waterways Corporation |
| Federal Housing Administration | Tennessee Valley Authority |
| Federal National Mortgage Association | United States Maritime Commission |
| Federal Savings and Loan Associations | United States Railroad Administration |

MANPOWER...

your most pressing Problem

If shortage of help is your bottleneck, if you would like to make inexperienced help more productive, if your office staff is jittery from constant strain, discuss your problem with a Monroe representative.

The job of Monroe is to speed production—to

relieve the manpower problem on such vitally important work as payroll calculations and records; statistics and special reports; cost and inventory records, posting and accounting procedures, etc.

Monroe Calculating Machines, Monroe Listing and Accounting Machines—and the expert service that goes with them—stand ready to help you in this emergency.

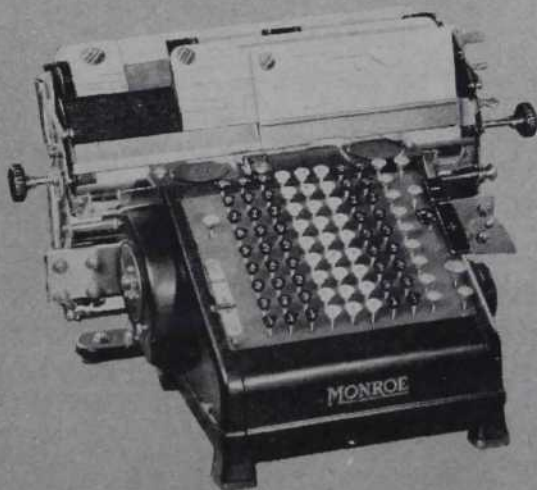
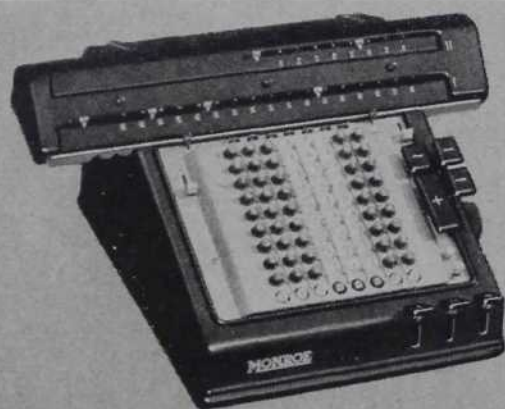
Call the nearby Monroe Branch; our representative will explain the availability of Monroe equipment under existing conditions. He can also suggest possible short-cuts and simplification of work to save many precious hours.

Ask for details about our Guaranteed Maintenance Plan, the economical way to keep your Monroes in top operating condition through regular inspections by trained Monroe specialists.

A timely example of Monroe's special wartime service is the new book—

MONROE SIMPLIFIED METHODS FOR PAYROLL CALCULATIONS

... ask your nearest Monroe representative for a copy or send in the coupon below.



MONROE

Calculating, Listing, Accounting Machines

Monroe Calculating Machine Co., Inc., Orange, N. J.

Please send information concerning Monroe Simplified Methods for Payroll Calculations.

Name.....

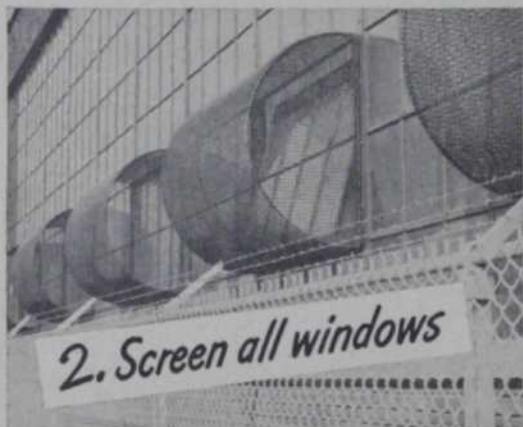
Company.....

Address.....

Cyclone keeps 'em out!



1. Fence entire plant



2. Screen all windows



3. Guard all gates

THIEVES, marauders, snoopers and trouble-makers of all kinds hate and fear Cyclone Fence. For they have found that Cyclone ruins their plans. Even if a prowler should get over the fence, the high steel barrier with the tough barbed-wire top makes a quick get-away almost impossible.

Thousands of America's war plants have been able to thank Cyclone for its help in keeping saboteurs from doing their dirty work.

There are three important ways to guard your property. First, fence the entire plant area with U-S-S Cyclone Fence. Second, screen all windows with Cyclone Window Guards of steel mesh. Third, post watchmen at all gates to check all who enter or leave the plant.

DO YOU NEED FENCE?

Demands are heavy and supplies limited, but if you are doing war work and have proper priorities we can provide fence and other materials to protect your plant. Get in touch with us. We'll make recommendations and give you a free estimate.

MAIL THE COUPON now for our 32-page book on fence. It's full of pictures and valuable facts. No obligation.

CYCLONE FENCE DIVISION (AMERICAN STEEL & WIRE COMPANY)
Waukegan, Ill. • Branches in Principal Cities
United States Steel Export Company, New York



**UNITED
STATES
STEEL**

CYCLONE FENCE

Clip this coupon—and send it to:
Cyclone Fence, Waukegan, Ill., DEPT. 5113
We'll send you our free, 32-page book on fence.
It's full of facts, specifications, illustrations.
Shows 14 types of fence. Before you choose any
fence for your property, get the facts about Cyclone. Mail this
coupon today.

Name.....
Address.....
City..... State.....
Interested in fencing: ☐ Industrial; ☐ School; ☐ Playground;
☐ Residence. Approximately.....feet.



sult would be the same. At present we are following a trend toward government monopoly. Business has been seduced by the ease with which it can get large sums of money from the government. It hasn't had to fight for it, even to earn it. Such money is an opiate. It puts to sleep the qualities that characterize free enterprise.

"In the postwar period government guarantees on lending would be not only unnecessary, but would carry with them the seeds of destruction of our entire system.

"The big issue is whether American banking and American business want the easy comfort of government credit, at the sacrifice of our whole concept of free enterprise.

"There will be a stopping-over period during the transition from war to peace during which government participation in financing will have to continue as a part of the cost of war.

"But it is my belief that as the reconstruction period peters out the question of government guarantees, government lending, government doing the job must be decided.

"The bankers and the business men will face the turn in the road. Either they are going down the road with government in a socialized state, or they will put a stop to government banking and go back to their own resources and private enterprise.

"The private banking system will be well prepared to take up the load. There's no scarcity of money. There's plenty of money in this country. We're spilling over with it and looking for something to do with it.

"The danger, as I see it, is in the seduction of the business man with easy government money.

"If a business man demands from the Government a continuance of government financing, then he will have little justification for opposing government for stepping into his own field—and the government certainly will do just that."

Perhaps the first test will come when the bankers decide what risks they will assume in the financing of postwar industry—and what risks, if any, should be spread over the nation by the Government.

Appealing to Women

TO ATTRACT new women workers, the Rhea Manufacturing Company in Milwaukee ran a two-colored advertisement in the local papers, offering free use of its machines on Saturday afternoon to its employees for their own sewing.

Other advantages of working for the Rhea Manufacturing Company were stressed: "You can buy sample garments at wholesale—as many as you want. Music at intervals throughout the working day. Meals in a fine, big cafeteria; good food at low prices. Vacation with pay. Free hospitalization. Earn while you learn."

This advertisement brought in applicants for jobs where ordinary want-ads had failed.



UNTIL this war is won, saving minutes here may mean saving lives on distant battlefields — and the railroads are making minutes count.

For every minute of the day and night, they move a million and one-third tons of freight a distance of one mile — most of it military weapons and supplies and the raw materials, the food and fuel necessary to keep production going at top speed.

Every minute of the day and night, the railroads keep track of the movement of 2,000,000 freight cars — marshaling them where they're needed — keeping them moving.

Every minute, day and night, fifteen new freight trains are made up and started on
NATION'S BUSINESS for November, 1943

their runs somewhere in America.

Every minute of the day and night, railroad men — modern minutemen — are at work on the biggest job in transportation history — to meet the nation's need.

**BACK THE ATTACK
WITH WAR BONDS**

Railroad work is essential work — war work.

DECEMBER 10 "CLOSING DATE" FOR CHRISTMAS PACKAGES. This year — when war traffic has first call on all shipping services — it is more important than ever to send your Christmas packages early.

Pack them adequately, wrap and tie them securely, address them right and get them started (to points in the United States and Canada) by *December 10.*

AMERICAN  **RAILROADS**
ALL UNITED FOR VICTORY

Never Before - A Motor

You've never seen a motor like this new Fairbanks-Morse Motor, because never before have so much stamina, versatility, and protection been put inside of one motor housing!

CHECK THESE POINTS:

- ✓ **1.** *40° C. Motor.*
- ✓ **2.** *Protected frame.*
- ✓ **3.** *Conduit box with features that give new meaning to "adaptable," "convenient," and "handy."*
- ✓ **4.** *Famous Fairbanks-Morse Copperspun Rotor—the ONLY rotor centrifugally cast in ONE piece and of COPPER.*

If you are buying motors now but want them to be up-to-date for postwar production, see this motor demonstrated. *There's no other way to appreciate how much more* it offers you! Fairbanks, Morse & Co., Fairbanks-Morse Building, Chicago, Ill.



FAIRBANKS-MORSE

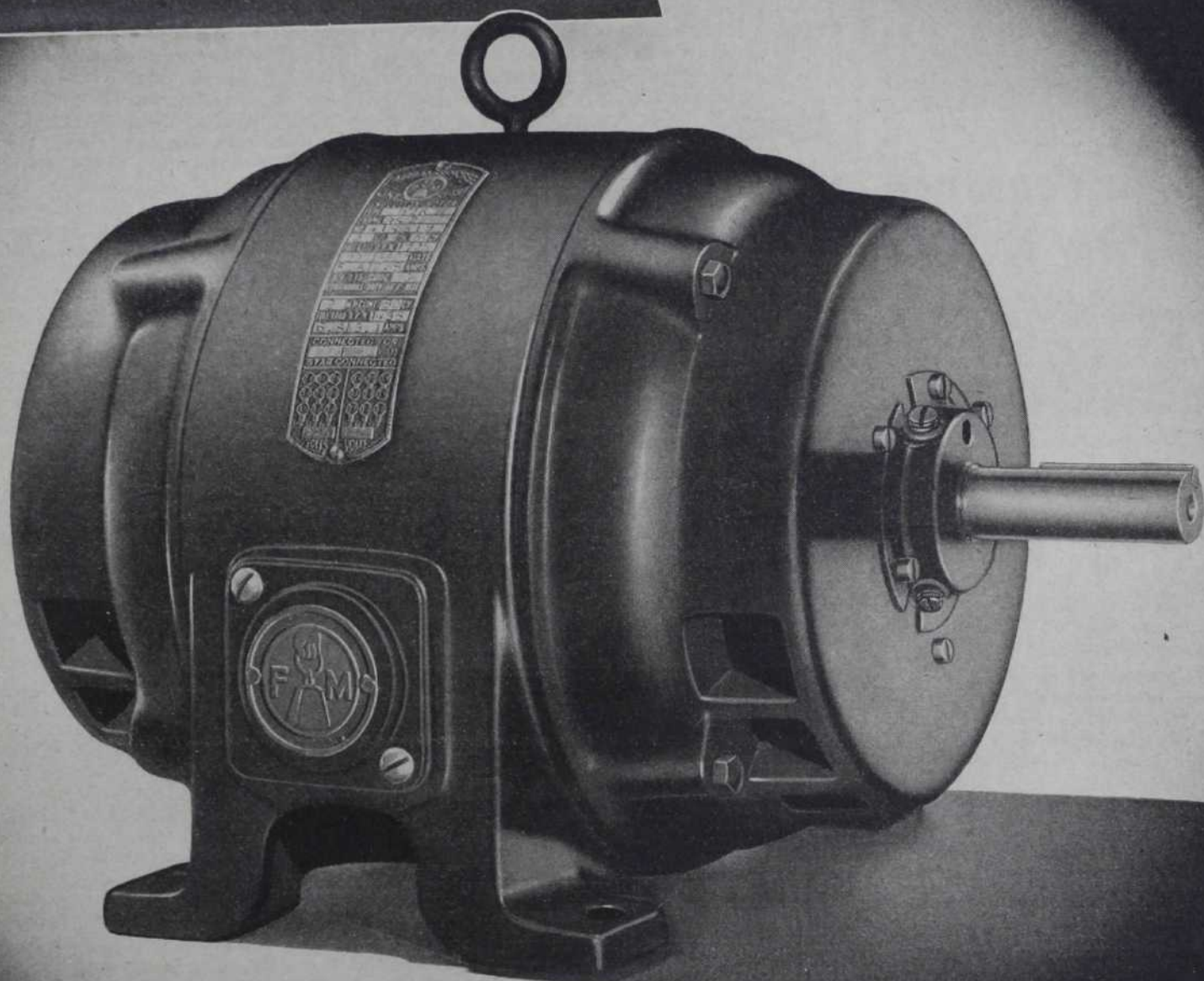
DIESEL ENGINES
PUMPS
MOTORS
GENERATORS
RAILROAD EQUIPMENT

WATER SYSTEMS
SCALES
STOKERS
FARM EQUIPMENT



Motors

Like This



WITH

Copperspun ROTOR

Buy War Bonds

IRON FIREMAN STOKERS...



Conserve Vital War Fuels

EVERY ton of coal—every barrel of oil—saved today is a *direct contribution* toward winning the war. For the battles of World War II are being won by fuels—at home and abroad.

Iron Fireman Stokers Available

You are allowed to buy Iron Fireman stokers for your heating or power plant during wartime because the authorities recognize today's urgent need for fuel conservation.

If you are now hand-firing coal, an Iron Fireman will cut the tonnage you burn. If you are oil firing, an Iron Fireman will release vital oil to the Army, Navy and Merchant Marine.

In addition, by sharply cutting the amount of coal burned, this modern automatic firing equipment saves labor four ways; at the mines, on the railroads, in local trucking, and in the boiler room. It releases freight cars for other war uses. It increases steam output of existing boilers, and steps up war production by giving uniform steam pressure and meeting peak load demands at lower cost for fuel.

Convert Now to Iron Fireman Firing

The nationwide organization of Iron Fireman engineers and dealers are ready to show you what Iron Fireman can do for you, and help you arrange for conversion of your present boiler. Write Iron Fireman Mfg. Co., 3453 W. 106th Street, Cleveland 11, Ohio.

Factories in Cleveland, Ohio; Toronto, Canada; Portland, Oregon.



IRON FIREMAN

Automatic Coal Stokers

What Business Does with Money

(Continued from page 23)

cost—that is, at a loss—we should all be happier.

If we remove the dollar sign from a business loss, it turns out that somebody somewhere has rendered services without getting anything in return. This means that this somebody not only must have a benevolent disposition but also must ultimately have the ability to produce and to live on thin air.

It is scarcely a compliment to us that lack of accounting clarity has made it possible gravely to discuss social theories which, if run through double-entry bookkeeping, would show up as socially impossible without the aid of an alchemy that could turn a loss into a profit—that many of the movements, which are blatantly labeled progressive, are viciously retrogressive, for they involve taking away and not replacing.

Please note that I have not yet said that we should "present the case for business" or "for free enterprise." We who are in business are not litigants in a great cause, with the general public as our adversaries. Business is not a thing apart. It is simply the same general public engaged in its own service of supply. Most of us are both producers and consumers. There is no one who always sells and never buys.

The notion that business is or can be an independent system or power either to take continuously from, or supply continuously to, the community is absurd.

Wages and taxes, which increase faster than the slack taken up by efficiency, must be paid for by the customer—that is, by the very people who think they are being benefited by them. The public and private provisions for old age, accident, unemployment and other liabilities are business costs. They are paid through increased prices and decreased purchasing power.

Business enterprise is not an originating source of funds; it is only an intermediate paymaster and, if its income from operations is less than its outgo, the difference can be made up only by selling off, directly or indirectly, the facilities which must be used for production. The relations are not changed by the size of the operations.

Exactly defining the function of a business unit is becoming of extreme importance in these days when so many postwar worlds are being constructed with alternate bricks of fact and fancy. The fancies—and a whole social fabric is being woven out of them—conceive of the paraphernalia of production and distribution as constituting in themselves the source of prosperity. In times of general prosperity, it is true, the machinery of production and distribution goes into high gear, and in so doing requires the employment of so large a number of human beings that nearly everyone who wishes work may find it at fairly satisfactory wages. This has brought about the widespread illusion that the whirring

of the machinery causes the prosperity and the employment.

From this illusion is deduced the theory that it is the social obligation of the owners of the machinery to keep it whirring and to preserve a high level of employment. It is declared that, when the owners shut down their machinery and discharge men, they are solely actuated by the vile purpose of promoting scarcity and preserving profits.

It thus appears that depression and unemployment derive from the cupidity and incompetence of private owners, and that the answer is to be found in the selfless competence of the perfect bureaucrats of the perfect state.

The complete employment of our facilities in war is offered as conclusive proof that it is within the power of the state to provide complete employment in peace. We are told that, the state having demonstrated its ability to employ, the people will not again tolerate any condition which involves less than a high level of employment and at a high level of wages. It follows, so it is said, that if private ownership cannot justify itself by maintaining these high levels, the state in its ripe competence and even riper confidence will take over.

Only economic servants

IT is rather odd to discover that many of those who call themselves business men subscribe to the fundamental illusion that we can act as if we have large orders in hand when we have only small orders and, therefore, find no difficulty in averring that business has the responsibility of learning how to go forward while operating in reverse—or else.

The "or else" connotes that the perfect state lies ready and willing to take over. If that were the case, and if only the cupidity of private owners stood between us and perfect material happiness, I am sure we should all stampede to the arms of the perfect state. But those of us who are in the management of industry know that we are only economic servants, that we possess no power to employ except as we are employed, that it is simply not possible to preserve, much less to increase, earnings by curtailing production, and that we are equally helpless with our employees against the primary power of our customers. We know from our accounts that we can produce and exchange our products only as others produce and exchange with us.

All of that would be wholly apparent if we simply and intelligibly presented our financial accounts; also it would be wholly apparent that, if the state stepped into our shoes, it would be in no better case than we are, because, although the items of cost might be shifted and given different names, they would all be present somewhere in the body economic. Government has the force to compel, but its only magic is the seeming magic of taxes and the money print-

THIS ISN'T NECESSARY

"I thought The Skipper would be an asset to our accounting department, but all he's done is tell us our latitude and longitude!"



You can **RENT** Comptometer Equipment!

- All at sea, gentlemen? No need to be. Even if your priority will not permit you to *buy* Comptometer calculating machines these days, you *can* rent them for limited periods of time.

- For details on this important and economical service, call your local Comptometer Co. representative. Call him now! The Comptometer is made only by the Felt & Tarrant Manufacturing Co., 1712 N. Paulina Street, Chicago, Ill.

COMPTOMETER

REG. U.S. PAT. OFF.

ADDING-CALCULATING MACHINES AND METHODS

TO INDUSTRIALISTS WITH

AN EYE TO THE FUTURE

INDUSTRIALISTS with vision are turning their eyes toward North Carolina as they make plans for the future. Here in this *balanced State* are to be found all the elements that assure an efficient and profitable manufacturing operation: Climate permitting year-round production . . . closeby markets . . . water, rail and truck transportation . . . hydro-electric power . . . raw materials

of the widest variety . . . loyal, intelligent *labor that prides itself upon giving a full day's work for a day's wage.*

Post-war industrial planners are invited to write today for specific information engineered to your field. Address Commerce and Industry Division, 3131 Department of Conservation and Development, Raleigh, North Carolina.

NORTH CAROLINA

ing press, and that is good only for a short series of one-night stands.

Rather than talk glibly about accepting responsibility—or else, let us try to fulfill the responsibilities which we have, in the faith that thereby we shall all learn the ways of a material organization in which every man gets the equivalent of what he produces—that is the American ideal. Our accounts must aid in realizing that ideal.

Our economy, although it consists of things, has to be expressed in their money representations. Our records are the master tools of our economy and they provide the facts which represent the things that make up our economy. Each enterprise is a segment, more or less tiny, of our national economy. The total of our records is the national economy. If each of us presents his segment in understandable form, the total national economy will be understandable—and as a nation we shall be in a position to arrange and govern ourselves on the facts, instead of by trial and error.

The larger our segment, the greater is our responsibility to achieve understandability. That is why I regard the intelligible annual report as an elementary act of self-preservation.

The U. S. Steel Corporation, I am proud to say, with its first annual report in 1902, broke the tradition that the best corporate report was the one that said the least. But in recent years it has been borne in on us that technical accounting and its language tell the story only to those few who have the ability to analyze such accounts.

Thus, for the purpose of reporting to the public, our financial affairs consist only of receipts and costs, and we have dropped out of all of our income statements the word "net," the word "profit," and the word "surplus." We have dropped also the practice of drawing sub-totals and making intermediate stops to note "income" or "profits" before this or that payment. We find that these words and intermediate totals divert the attention from the central truths.

Only one kind of income

THE words "net" and "profit" imply that a business at the end of its fiscal year comes to a dead stop and, therefore, makes it possible to determine with finality what is a "net" and what is a "profit." We all know that a business never comes to a dead stop except at dissolution and therefore the figures designated as "net income" or "profit" are not accurate terminal figures, but merely estimates. We hold that there can be only one kind of income and that it is the figure obtained by subtracting all the costs from all the receipts. It is only confusing to insert sub-totals.

Basically, we account for all the money that has been paid to us in the course of the year. That, we believe, is what the public expects us to account for. We are answering the questions:

"What did you do with the money we paid to you? Who got what out of the business?"

The first major item in our presenta-



Move over, lake . . . we need that ore!

They don't stop even at moving lakes, up on the great Mesabi Range where this big P&H Electric Shovel is tapping new pockets of rich, red-brown ore. That's typical of the men whose job it is to supply America with the iron and steel needed to satisfy war's enormous appetite. No matter what the obstacle, they deliver!

It's the kind of job that calls for vision, courage and "know-how." And it calls for the kind of equipment that will meet the challenge—machines that won't tire, no matter what is asked of them to deliver on schedule.

Leaders in applying electrical power to the movement of heavy loads, P&H has put the best of its 60 years' experience into the design and construction of these big P&H Electric Shovels. They are serving

America here and elsewhere on the mining front. They are doing it with the speed and reliability that are helping to bring the war to its earliest possible end.



MILWAUKEE 14, WISCONSIN
Electric Cranes • Electric Hoists • Welding Positioners
Excavators • Welding Electrodes • Arc Welders



THREADING OUR WAY TO VICTORY

WE'RE a part of the firm of AMERICA, Inc. The product this vast organization is manufacturing is DEFEAT FOR THE AXIS, to be delivered in full, RUSH!

Our department is the Threading Dept. and we make Precision Thread Cutting Tools. These are vitally important in turning out tanks, planes and diverse war materiel that our men in foreign fields are using to convince the Jerries and Nips that American war equipment is best!

This job of ours, as can be well understood, is a Key one. It calls for the highest type of skilled workmanship, and specially developed equipment. The Taps and Tools we turn out must be rugged enough to stand the gaff of high-speed war production. They must be consistently accurate to the greatest degree—many to one ten-thousandth of an inch.

It is with great pleasure that we report to the stockholders of AMERICA, Inc.—every man, woman, and child of them—that our Threading Dept. is expanding. Continuous patronage by old customers and a list of new ones that is growing daily are causes for much satisfaction. We are proudest, however, in the realization that the Detroit Tap & Tool Company is most assuredly *threading its way to Victory*.

You've done your bit—now do your best
BUY UNITED STATES WAR BONDS

DETROIT

TAP & TOOL CO.

8432 BUTLER AVENUE • DETROIT, MICHIGAN

GROUND TAPS • GROUND THREAD HOBS • THREAD GAGES
 SPECIAL THREADING TOOLS AND GAGES

tion is "Total Products and Services Sold." It comprises sales and miscellaneous revenues. It is, in terms of the simple account, the total received from our customers. In an ultimate sense, everything below that figure is a cost to the business.

We present our total operations in relation to the primary elements which pertain to all business. Each of these elements is set forth in detail. The first cost element presented is what we call "Employment Costs." It comprises wages, salaries, social security taxes and pensions. In our presentation—as distinguished from the traditional accounting statement where such an item is not shown—we have grouped these important costs together.

A major element of cost is "Purchased Products and Services." This represents the sum spent for outside purchases of goods and services in order to do business. Although we had some selectivity as to sources, we had little control over this cost element.

Cost of wear and tear

WE all know that the wear and usage of facilities in production—comprising such items as depletion, depreciation, amortization and losses on fixed assets—is a basic cost. Yet it seems to be the first item attacked by anyone who wants to make it appear that more money has been earned than stated. Depreciation must be presented for what it is—the cost of the wearing out of the facilities the workers use.

The next cost element in our presentation is one about which there is great controversy at present. In the traditional accounting language the item has been referred to as a "contingent reserve" or as a "special reserve" or simply as a reserve against specified items. Such terminology gives a plausible basis for the assertion by those who attack business that this is nothing more than "additional profit" which has been withheld.

Nothing could be more inaccurate. By way of emphasizing the real character of this element, we have termed it "Estimated additional costs applicable to this period arising out of war." This element represents management's estimate of the cost of repairs which, because of the high rate of operations, must be deferred until a future time and of those costs which will be incurred in the transition to a peacetime basis at the end of the war.

The interest item in our presentation represents, of course, the payment for the use of borrowed savings and is recognized by most, but not by all, of those dealing with business as a proper cost element. The significant point here is that interest is a cost of developing income. Interest is definitely one of those costs which are inescapable—assuming the use of any borrowed funds for the purpose of providing facilities for the use of workers.

The final element of cost is taxes—federal, state and local. There are many in our government—as witness the philosophy of the renegotiation procedure—who consider that taxes are not

A NEW DAY DAWNS IN RAILROADING



Flow of war materials has more than doubled the normal volume of freight hauled by the Western Pacific Railroad from Salt Lake City to San Francisco through the Feather River Canyon. Wherever the going is toughest on this rugged route, General Motors Diesel freight locomotives are the "commandos" of motive power which keep this vast stream of vital munitions moving steadily toward the men who will mop up Hirohito.



Construction is entering a new day too. War building is being rushed ahead with reliable General Motors Diesel power. And in the days to come this dependable, rugged, economical power will be ready to do the hard jobs of peace.

Here is a crack "Express Train" of 1865 as pictured by Currier & Ives. Four years later an important new era in our transportation and economic history was celebrated with the completion of the first railroad linking the Atlantic and Pacific.

Throughout history, wars have set up new milestones of transportation progress. And with this war, it is the General Motors Diesel Locomotive that is ushering in the new era. What advances the future will bring are already apparent in the present performance of these locomotives and the way they are helping to meet the abnormal demands upon the railroads today.

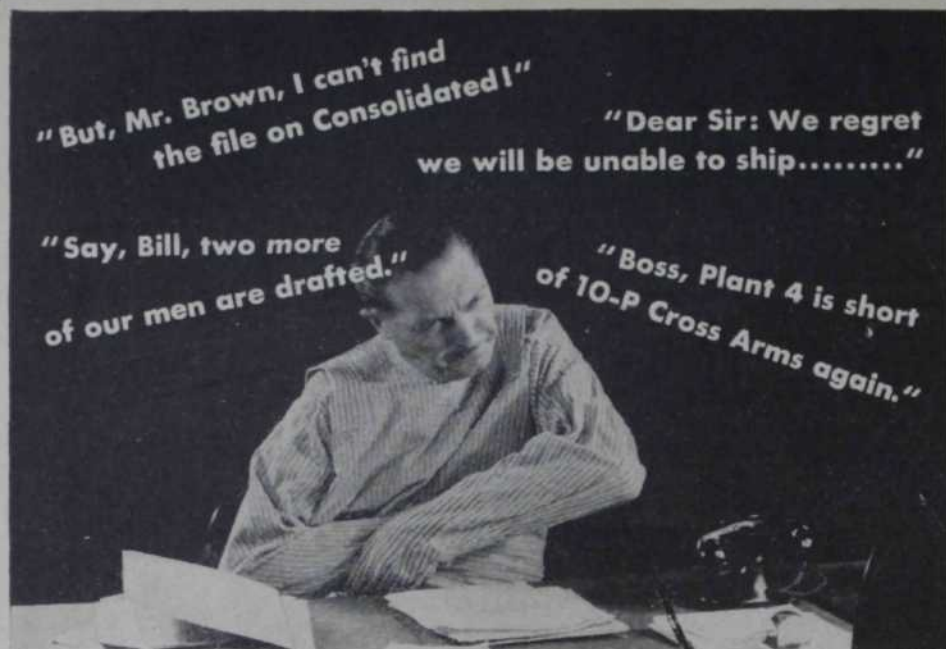
BACK THE ATTACK—WITH WAR BONDS



LOCOMOTIVES.....ELECTRO-MOTIVE DIVISION, La Grange, Ill.

ENGINES..150 to 2000 H.P...CLEVELAND DIESEL ENGINE DIVISION, Cleveland, Ohio

ENGINES.....15 to 250 H.P.....DETROIT DIESEL ENGINE DIVISION, Detroit, Mich.



"But, Mr. Brown, I can't find the file on Consolidated!"

"Dear Sir: We regret we will be unable to ship....."

"Say, Bill, two more of our men are drafted."

"Boss, Plant 4 is short of 10-P Cross Arms again."

What the hard-pressed Business Man will wear

Yes...it's enough to drive anybody into a strait-jacket. Yet you Executives *still* have to carry on the best you can.

But...is it "the best you can"? What about that weak link in your office or plant production that can be strengthened by a better method?

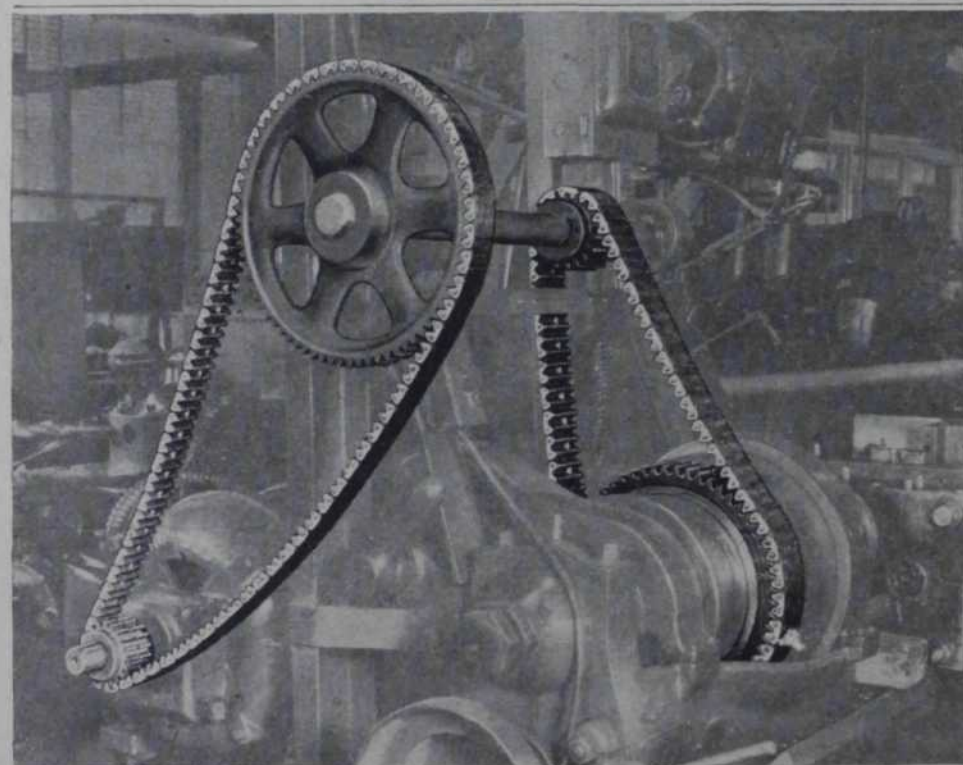
Remington Rand's Systems and Methods Technician would like to take a crack at that bottleneck. Whether Material or Production Control, Personnel, Procurement, Cost Accounting or even Sales Planning, let him analyze your office and plant

records and routines.

One thing you can count on: his carefully-considered recommendations *will* up productivity in your organization!

Arrange now to have him drop in for a preliminary discussion!

REMINGTON RAND
BUFFALO 3, NEW YORK



★ Output increased 25% . . . operating costs appreciably decreased . . . Morse Silent Chain Drives on this job. ★
Consult Morse about your power transmission problems.

SILENT CHAINS

ROLLER CHAINS

FLEXIBLE COUPLINGS

CLUTCHES

MORSE positive DRIVES

MORSE CHAIN COMPANY

ITHACA, N. Y.

DETROIT, MICH.

DIVISION BORG-WARNER CORP.

a true cost. But the real fact is that taxes are as inescapable as any other item of cost.

The American corporation is the favorite tax whipping boy because it has no effective way of talking back with votes. But corporations are only tax collectors, taking from the customers for the Government. There is a fiction that the shareholders and not the public pay corporate taxes.

We in business tend to confirm the fiction by our habit of expressing taxes as so much per share. It makes the mouths of shareholders water to think what they might have had, were it not for taxes. In the same way it may flatter the management's vanity to imply that, but for the tax collector, they would have done wonders for the stockholders. But the effect on the public and their political representatives is quite otherwise. They believe that, except for the tax, the stockholders would have been pulling down wads of unearned money. Both the stockholders and the public are, of course, wrong. Corporate taxes are simply costs, and the method of their assessment does not change this fact. Costs must be paid by the public in prices, and corporate taxes are thus, in effect, concealed sales taxes.

Part of the income left after subtracting these various costs may be paid as dividends and the other part may be carried forward for future needs.

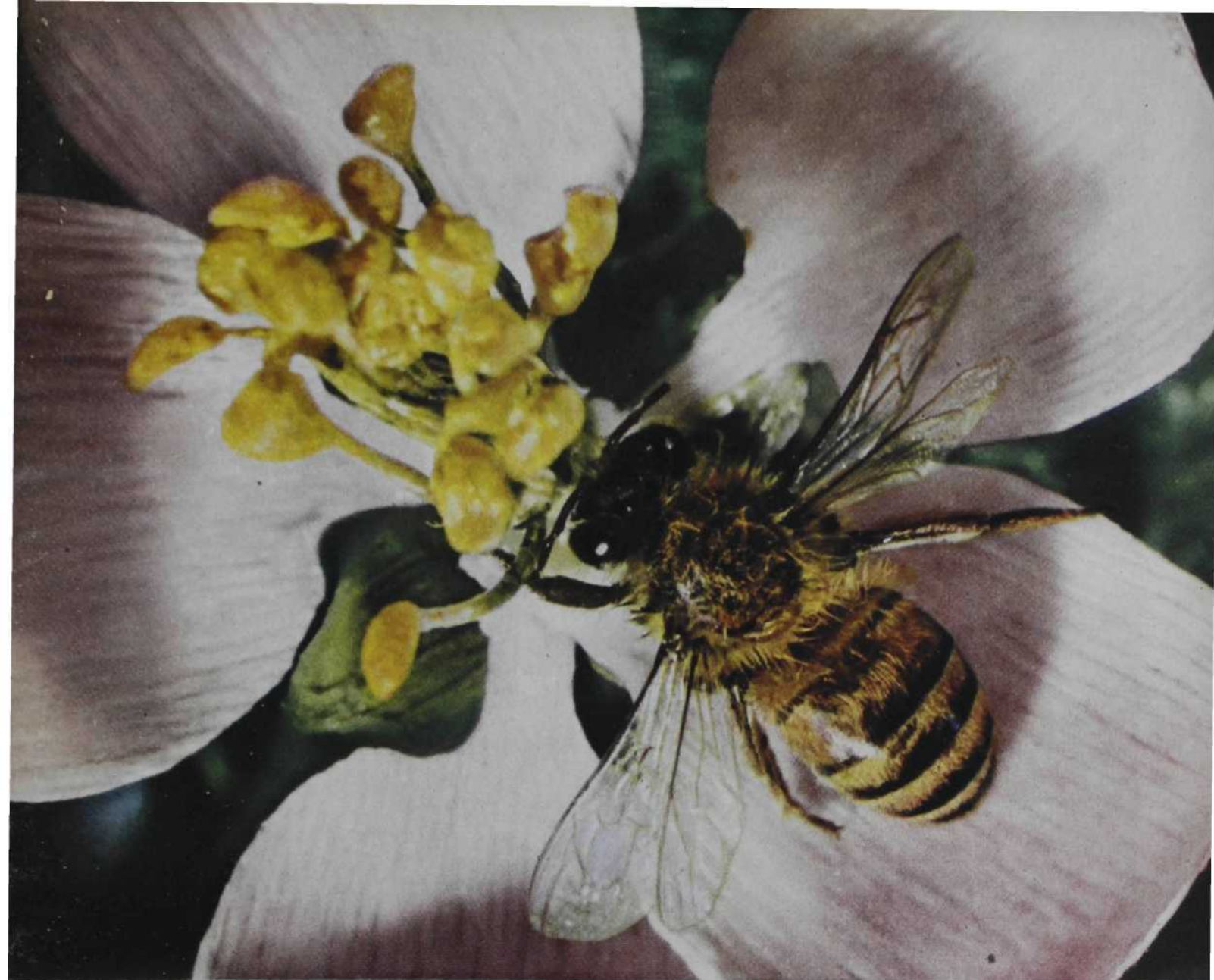
What "surplus" really is

LET me define this last item. It is not a "surplus"—which the public believes to be a fund nobody knows what to do with—but is rather in the nature of insurance because it must stand the losses during the periods of bad business; the changes in tools and machinery demanded by scientific progress over and above the sums set aside for ordinary wear, usage and obsolescence; the payment of long-term debt and other obligations; as well as the meeting of emergencies which are bound to occur.

The sum left over—to be paid in part to the owners, as wages for the use of facilities, and in part carried forward for future needs of the enterprise—is not a technical cost of operation. Yet it must be clear that, unless there be a return, even though a limited one, to the stockholders, the damper on private enterprise will be such that economical financing for future needs is likely to be seriously affected.

Public opinion is formed by the relatively few. In every shop, public opinion is formed by a small number of intelligent workers and the same is true of every community. It is the job of business to provide these people with the facts on which they can form their opinions, to make the case for the truth and the facts as they are and to do it in clear language that will convey its complete understanding.

Unless we do obtain an understanding of the components of a healthy production and distribution, there can be no future for the enterprise system. It is a task in which we must not fail. It is a task in which we need not fail.



One of a series illustrating Cyanamid's many activities.

Science follows a Bee line

Next time you taste the delicate flavor of fine ripe honey, remember that it is the product of a specialist—a specialist who does his job with remarkable efficiency. Indeed, the process by which a bee transforms nectar into honey is so interesting that science is following a similar technique in developing new methods for industry.

Key to the bee's production method is *enzyme* action. Enzymes are produced by every living cell—in molds, bacteria, yeasts, plants and animals. They have been found extremely useful in promoting digestive and fermentation processes and in aiding other chemical reactions. So, special strains of enzymes are now being "grown" on a commercial scale and put to work with interesting results. For instance, they have

made possible improvements in the tanning of leather, the dehydration of foods, and the synthesis of vitamins. Again, they are used to improve the "keeping" qualities of fruit juices and for "chill-proofing" beer. In the dry-cleaning industry their action is highly effective in removing stubborn stains. They are also increasing the efficiency of certain steps in the manufacture of paper, textiles, and other products.

Chemists envision in the study and application of enzymes a whole new phase of chemical progress. Cyanamid, among the first to recognize the possibilities of enzyme chemistry, pioneered their use in various industries, and

is continually seeking through research to discover new applications. It is the beginning of another dramatic and exciting chapter in Cyanamid Chemistry.



**American
Cyanamid Company**

30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

MOLDING THE FUTURE THROUGH CHEMISTRY



KEEPING APPOINTMENTS WITH CONVOYS

In a day's combat, an infantry division fires about 300 tons of ammunition . . . 100 37 mm. anti-aircraft guns, 127½ tons . . . and the thousands of army vehicles "passing the ammunition" and other supplies each burn up an average of 10 gallons of gasoline . . .

All of these materials — the guns, the "gas", the ammunition, the vehicles — *plus 700,000 other different military items*—must come by sea.

A gigantic supply task without parallel in the history of the nation, this job calls for the finest coordination of American railroads with ships.

The railroads must bring everything to ship sidings exactly as needed—and when needed. Any slip, any delay, may hold up a convoy sailing.

So keeping appointments with convoys is one of the most important jobs railroads have these days.

If pushing a "convoy train" through ahead of your passenger train caused you to be a little late for an early-morning business appointment, the Pennsylvania Railroad feels sure you will gladly overlook it. The demands of war must have not only railroad equipment—but the right-of-way!

★ 36,671 in the Armed Forces
★ 67 have given their lives for their country

BUY UNITED STATES WAR BONDS AND STAMPS

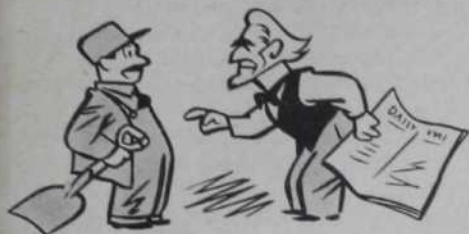


PENNSYLVANIA RAILROAD

Serving the Nation



Super-Janitor



Charles A. Peters has a man-sized job looking after Uncle Sam's 492 federal buildings

IF Charles A. Peters is not the world's greatest janitor, he will do until a greater one comes along. Of course, calling Mr. Peters, who is Buildings Manager for the United States Government, a "janitor" is a slight irreverence but, as operator of 492 federal buildings in and out of the District of Columbia, his duties resemble those of a super-janitor.

He is responsible for the work of 13,500 employees in buildings valued at nearly \$500,000,000. He spends \$25,000,000 a year.

Mr. Peters not only has a big job. He is a big man. Six feet, two inches tall, he has the build of a very husky janitor, but he never really was one. He is a civil engineer.

He has been concerned with the design, construction or operation of United States government buildings since 1920 when there were only about 30 of them.

A hand in many things

ON the way to his present position, Mr. Peters has been concerned with the construction of the Lincoln Memorial, reconstruction of the White House and Executive offices, preliminary engineering designs for the new Interior Building, and the creation of the central steam-heating plant for government buildings. He had a hand in the engineering design of the Federal Warehouse (now the Procurement Office), the two Red Cross buildings and the Memorial to the Women of the First World War.

Government buildings are financed and built under the Public Buildings Administration. They are operated by the Buildings Manager's Office. That office is organized in four divisions: service, protection, technical and fiscal.

The service division buys the supplies—coal (170,000 tons last year), oil, paint, plaster and water—you could float a battleship on the tide that flows through the myriad miles of pipe threading the 1,400 acres of buildings under Mr. Peter's control. This division moves the government offices hither and yon as emergencies and departments direct.

Since the war these moves have been frequent and sizable. A thousand employees and 100 trucks are chiefly occupied with this task. The service division also handles correspondence, and the



Somebody slipped up ... back in the States

An undetected broken part... and at a crucial moment a tank, a plane, a gun goes out of action. A tragedy born back in the States when somebody improperly packed a part for shipment.

Making precision instruments of war is just a portion of the home-front job today. There must be precision *packing*, too.

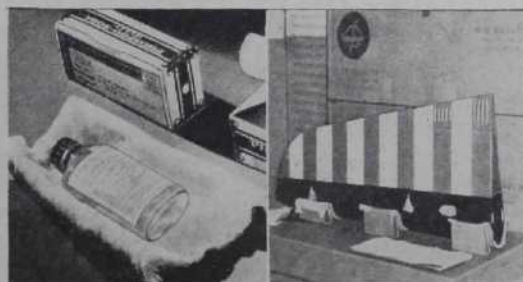
So, in defense plants throughout the nation, KIMPAK* Creped Wadding now is widely used for packing war material of all descriptions. In KIMPAK, a million tiny air-cell "shock-absorbers" cushion

the jars and jolts that often cause damage during transportation.

Parts made of plastic, glass, wood, or metal... objects large or small, light or heavy, and of every conceivable size and shape now reach their destinations *safely*... thanks to KIMPAK.

Don't risk using a type of packing that may fail. Specify low-cost "shock-absorbing" KIMPAK and *deliver* the goods with the same painstaking care that you use in *making* them! The KIMPAK booklet gives you all the *facts*. Mail the handy coupon for your copy... now.

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Moisture-absorbent KIMPAK can absorb 16 times its weight in liquids.

KIMPAK provides shipping protection for all types of plane parts.

*KIMPAK (trade-mark) means Kimberly-Clark Wadding

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This piece of South American quartz crystal is remarkable for its piezo-electric properties. Ground so it responds to the proper frequency, it becomes a most important part of electronic devices used by our armed forces. . . . This grinding is a very "touchy" operation. Our special equipment and specially trained personnel are doing a fine job, we believe. . . . This is one of "Connecticut's" contributions to the war effort.

CONNECTICUT TELEPHONE & ELECTRIC DIVISION



MERIDEN, CONNECTICUT

● Our development engineers are glad to discuss electrical and electronic product ideas which might fit in with our postwar plans. Address Mr. W. R. Curtiss at the above address.

direction and discipline of personnel.

The protection division attends to the prevention of fire, theft and sabotage, and is charged with air-raid precautions.

The technical division looks after air-conditioning, plumbing, elevators, engines and motors, cleaning, sanitation and repairs. It is responsible for the planning of alterations, and the architecture of structural additions.

The fiscal division figures the costs and pays the bills.

The buildings under Mr. Peters' management range in size from the vast Pentagon, with its 138 acres of floor space and its 35,000 occupants, down to the information kiosk on Pennsylvania Avenue, where two is close company and three is a mob.

All kinds of structures

THE buildings vary in material from chaste marble to corrugated iron, with granite, sandstone, brick, pine, celotx and plywood in between. Some of them have taken ten years or more to build, and some of the temporary buildings have been slapped together overnight—and look it.

Of the buildings which Mr. Peters' office operates, 325 are in the District of Columbia, and 167 are scattered east, west, north and south. They include custom houses, garages, theaters, post offices (most of the post offices, however, are under the Postmaster General), immigration stations, merchandizing marts, forest service stations, libraries, barge offices, treasuries and sub-treasuries, hotels, aquariums, museums, memorials, monuments and tombs, airports and archives, naval and military buildings, hospitals, schools, clubs and laboratories, armories and courthouses.

In these structures some 400,000 people work or live—sometimes both.

They can look out through about 900,000 windows, containing 5,000 acres of glass. A good window-washer, according to the foreman of a window cleaning company, will do about 100 windows a day. If he tried to do it alone it would take him 27 years to finish a once-over job for the Buildings Manager. Actually a small army of window-washers is on the job, and if you had the contract to supply them with brushes and soap, you'd have a nice business.

One matter on which nobody seems to have any statistics, or even any approximate idea—(P.S. I've consulted six different sources on this)—is how much wiring there is in the federal buildings. It appears that different circuits have been installed at different times for various purposes by from three to ten different government agencies, so that when repair men tear up a floor now and then, they discover wires, conduits and cables, dead and alive, that the oldest custodian can't account for at all.

On the authority of the Buildings Management, 621 elevators service these buildings. That doesn't seem many. But, since the average height of the buildings is seven stories, vertically you have one elevator to every 12,000 square feet. Besides, Washington is a horizontal city, and most of the inter-office travel goes

via corridor and by staircase.

There are 1,200 miles of corridors in the government buildings, and if you started out to walk them all, the distance wouldn't seem much farther than the distance you'll go any day looking for the office of the man you want to see, who will have moved to another building when you finally stagger through the door.

Incidentally, the care and feeding of a large part of the office population of these government buildings involve the services of many more persons in addition to the 13,000 plumbers, firemen, janitors, engineers, electricians, painters and scrub women who compose the Buildings Management's "custodial" force. There is a system of cafeterias in the large buildings which feeds at least 100,000 persons daily, and employs several thousand persons doing it. The cafeterias are a concession, but under the general superintendence of the Buildings Management, and operate on a small profit.

—BERTON BRALEY



Plastic Tube

Glenn L. Martin, president of the Glenn L. Martin Company, builder of the Martin Marauder, Baltimore and Mariner bombers, is shown here with an inner tube made of a new kind of rubber substitute—an elasto-plastic substance known as Marvinol.

Marvinol, which is produced from coal, limestone, salt, lampblack and water, was developed by Clayton F. Ruebensaal and Earl H. Sorg in the Martin Plastic Research Laboratory. It is not a synthetic rubber, according to Mr. Martin, but a completely new material which is better suited than rubber for many of the purposes for which rubber is now used.

Inner tubes can be fabricated more easily from Marvinol than from rubber, it is said, and because of the absolute permeability of the elasto-plastic, the seepage of air through the sidewall of the tube is entirely eliminated—an accomplishment which could not be obtained with even the finest rubber gum.

Marvinol is 100 per cent reclaimable. When a tube is damaged, the motorist, instead of discarding it as a loss, will be able to turn it in on a new one.

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TORONTO

Clearing the Road for Jobs

By EMERSON P. SCHMIDT

Economist, United States Chamber Committee on Economic Policy

IF WE are to prevent postwar unemployment, we must not ignore the fact that, in our civilization, man does not work with his bare hands. Rather, men work with tools, machines and other equipment, ranging in cost from \$2,500 per worker in the leather industry to \$25,000 in railroads and steel. The national average shows about \$5,000 invested for each worker employed.

Stripped to essentials, then, the employment problem becomes an investment problem. For every returning soldier who gets a job, somebody must invest \$5,000. Therefore, anything which affects the investor's willingness or ability to save money for investment also affects the ex-soldier's chances for employment.

Viewed in this light, questions of fiscal policy take on a new significance. Obviously any plan for postwar prosperity must involve careful consideration of all factors that affect the incentive to invest. Among these factors, one of the most important is taxation.

Perhaps the greatest defect of our income tax structure is its failure to distinguish between real income and savings. Savings are not real income so long as they are not spent for personal consumption. If a person or a

tive to invest and thereby deprive someone of a job; we tax both the savings and their fruits.

Furthermore, the Government itself by taxing both income and savings reduces the base upon which to levy taxes in subsequent years. Had the present system of high taxes on savings been in effect in the first two decades of the present century, the Ford Motor Company would have remained a small affair employing only a few people instead of thousands; furthermore, we would have remained in the horse and buggy stage of development.

Already there is a suggestion to continue the present high wartime taxes on corporations after the war. Whether this stems from a desire to cripple private enterprise or from a desire to cater to the popular clamor for soaking the rich, the policy, if adopted, is almost certain to destroy a great deal of enterprise and potential expansion.

This is true especially because of the intermittent character of profits. For the Government to take from 25-75 per cent of the profits in those years when they occur, and force the stockholders to absorb the losses in the years when profits do not occur, destroys the incentive to expand.

Even in prosperous years some 35 per cent of all corporations have no earnings subject to income tax. During depression years only a third or less of all corporations have earnings.

Under the 1943 tax structure, a corporation with an investment of \$20,000,000 and a return of ten per cent before federal income taxes, or \$2,000,000, would yield a

net corporate return of \$790,000. If this income were paid out to a single stockholder with no other source of income, after paying individual income tax out of the \$790,000 he would retain only \$121,000 or a re-

turn of only 0.6 per cent on his investment. If the net corporate income were divided between ten stockholders the yield on the investment would be only 1.6 per cent.

In addition to a federal corporate and individual income tax liability, most corporations are also liable to a further state income tax, as are the

IF WE ARE TO PUT our savings to work and create new jobs, we must find new ways of stimulating the spirit of enterprise and the willingness to take risks in industry

stockholders, on the income received by them.

Obviously, if these rates continue, these stockholders would be better off if they liquidated the corporation, laid off the workers, and invested their money in two per cent government bonds. This is what we mean by saying that corporate taxation can and does destroy the incentive to invest. Profits do not occur every year. So if the Government takes 70, 80 or 90 per cent of the profits when they do occur, and the investor is asked to absorb the losses, quite clearly he is not looking after himself and his family if he continues to invest in uncertain enterprises.

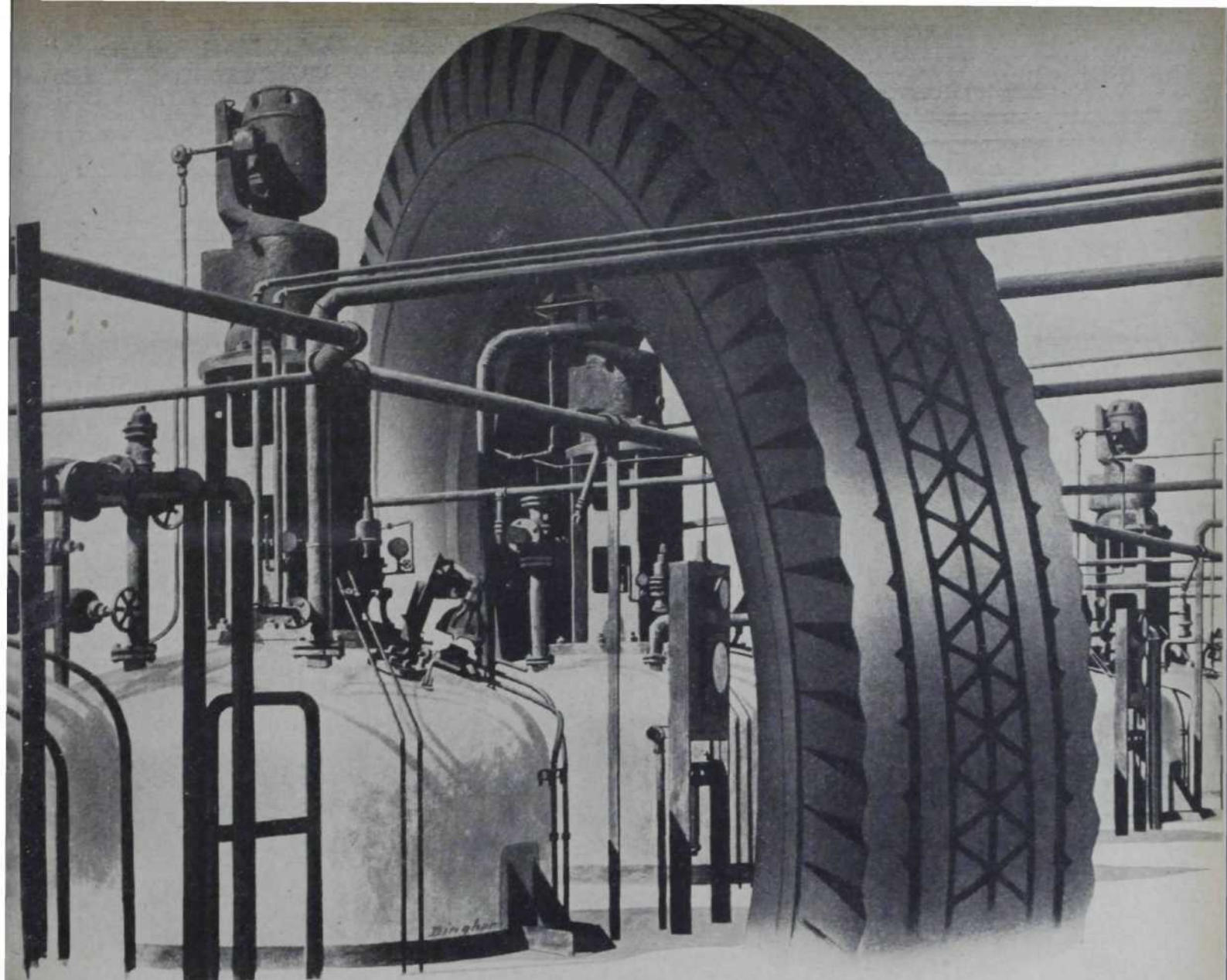
Deterrent to recovery

SOME corporations were able to make some savings in the 1930's but, for corporations as a whole, there were no savings for the entire period from 1929 to 1939.

The scarcity of business savings in the 1930's was a serious deterrent to recovery. The principal sources of new venture or risk capital has always been the plowed-back earnings of business enterprises; these savings have been essential nest-eggs to lure additional capital from the outside. If we

A FREE ENTERPRISE economy is one under which free men show enterprise. But the people, too, through their government and other institutions have an equal obligation to help create the atmosphere and conditions which are conducive to industrial expansion

corporation has \$10,000 left after meeting all business expenses and, if \$5,000 of this is invested in plant and equipment, this \$5,000 is not income but capital. If we tax this \$5,000, obviously we reduce the incen-



BUY UNITED STATES
WAR BONDS AND STAMPS

HOW AMERICAN INGENUITY IS SOLVING THE RUBBER PROBLEM

When shortage of natural rubber threatened a major disaster, the government enlisted the nation's outstanding engineering brains to execute a synthetic rubber program. This is now in operation.

The role of Blaw-Knox in this new industry was to design a standard buna-S copolymer plant. This design was used as a basis for all such plants, saving manpower and critical materials, and resulting in simplification and speed of fabrication and erection. Blaw-Knox also fabricated and installed thousands of tons of equipment and hundreds of miles of piping in a number of these plants and turned the completed plants over ready for operation. Blaw-Knox activities, however, go beyond synthetic rubber; they extend to such chemical and process operations as . . .

Distillation • Gas Absorption • Solvent Extraction and Recovery • Heat Transfer • Furnacing • Cracking • Kilning and Calcining • Polymerizing • Evaporation • Crystallization • Drying • Mixing and Stirring • Organic Synthesis • Emulsification • High Pressure Processing • Impregnating • Gas Cleaning and others.

Blaw-Knox can plot your flow sheet, cooperate with your engineers and designers in producing a complete new plant, or in adding to or altering one already in operation. Blaw-Knox engineers welcome an opportunity to discuss with you your present or post-war problems.

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STEEL PLANT EQUIPMENT	RADIO & TRANSMISSION	STEEL & ALLOY CASTINGS
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A FEW VICTORY PRODUCTS

ANTI-AIRCRAFT GUNS	AERIAL BOMBS	SYNTHETIC RUBBER PLANTS
GUN MOUNTS	POWDER PLANTS	CAST ARMOR FOR TANKS &
GUN SLIDES	PIPING FOR SUBMARINES	NAVAL CONSTRUCTION
		CHEMICAL PLANTS



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Four Blaw-Knox plants have been awarded the Army-Navy "E" for war-production excellence.



Today's war of movement goes into even faster action as the 'round-the-clock allied air attacks soften up enemy-prepared positions, blast supply lines and wreck armament plants.

Here at Acme, we're also in action—24 hours a day. Every previous record in producing tools, patterns, and heat-treated aluminum castings has been broken. And new records have a very short life. For the faster we work, the more we help war production plants to deliver fighting tools on time.

An experienced staff of engineers is a vital part of the Acme organization. Why not let us see if we can help you eliminate any bottlenecks that may be lessening production in your plant?

ACME PATTERN & TOOL COMPANY, Inc. DAYTON, OHIO

Heat-Treated Aluminum Castings—Patterns—
Tools—Tool Designing—Production Processing



BACK THE ATTACK BUY WAR BONDS

are to put our savings to work and create new jobs, we must find new ways of stimulating the spirit of enterprise and the willingness to take risks in business, and of increasing the proportion of our population which makes its living by providing jobs, rather than by merely trying to get on someone's pay roll.

During most of our history we have not been short of investment opportunities so that we have never had to consider policies to encourage investment. Now (pre-war and possibly post-war) we seem to be short of outlets for investment, not because they do not exist but because the hurdles appear to be too great.

Encourage investors

TO INDUCE the typical saver to invest in enterprise, such investment must be safeguarded by equity capital; that is, unless we can find a risk-taker who is willing to invest, say \$10,000, in an enterprise, there is not sufficient inducement for the ordinary saver who seeks safety to match this equity capital by lending another \$10,000 of mortgage capital.

The most important source of equity or risk capital has always been re-invested earnings. During the 1930's industry as a whole had no earnings to plow back after the payment of dividends. If no dividends are earned and paid, the incentive for additional investment does not exist. In several years corporate deficits as a whole exceeded corporate earnings. Unless industry has enough earnings to plow back, it is unable to lure loan capital into productive enterprise.

Tax policies which discriminate against business or the corporate form of business should be avoided; on the other hand, special privileges or exemptions for corporations may be open to abuse and may not instill confidence because what one legislative session may give, the next one may take away.

The present system of double taxes on the profits first in the hands of the earning company, and then on them in the hands of the stockholders, should be eliminated; sole proprietorships and partnerships do not suffer this double taxation. Because of the erratic and fluctuating nature of profits, greater provision should be made to offset earnings in the good years by the losses in the bad years along the lines in effect in Great Britain. Levying taxes by the year is an accounting convenience, but it ignores the economic realities underlying the earnings pattern of our business units over the years.

Because of the failure to recognize this fact, income taxes actually absorb more than 100 per cent of the earnings of some industries over a period of years, strange as this may seem. Funds earned and reinvested, because they constitute savings rather than real income, might be totally exempted from taxation or taxed at reduced rates.

Our present tax policy has been heavily dominated by the "ability to pay" theory. While this is important, it is only

one of many considerations which should govern tax policy. Equally important, if not more so, is the effect of a given tax policy on the incentive to invest in new job-creating facilities.

Without new investment we cannot have genuine prosperity or high levels of employment. Moreover, if business men refuse to expand, refuse to make new investment, they will be liquidated in time by the democratic process. Any defensive position of inaction, disinvestment or hoarding savings will hasten the end of free competitive private enterprise.

If the private enterprise system is to be preserved, it is necessary that business men remember that a free enterprise economy is one under which free men show enterprise. But the people, too, through their government and other institutions have an equal obligation to help create the atmosphere and conditions which are conducive to industrial expansion; not profits primarily but profit *expectations* must be maintained.



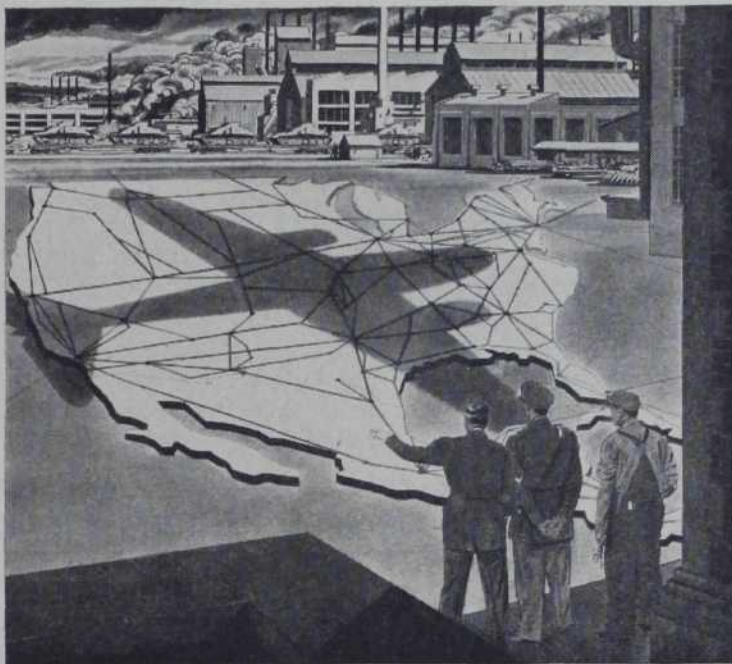
Tough Steel

Martin Fleischmann is shown here as he appeared back in World War 1 when he was a German observation pilot. Fleischmann is now an American citizen, in charge of the Metallographic Laboratory of the Timken Roller Bearing Company, and has developed a tough, heat-resistant steel which the company produces. This special steel is used in making part of the turbo-supercharger which enables our bombers and fighters to fly at altitudes above the effective range of enemy anti-aircraft fire.

After the war, Fleischmann studied mechanical engineering at the University of Munich, specializing in metallography. When he graduated he became assistant professor of metallography at the university. He came to this country in 1924.

In 1928, Fleischmann took over his present job at the Timken Roller Bearing Company. Since then he has made many contributions in metallographic research, one of the most important of which is his heat-resistant steel which today is paying big dividends in lives and planes saved.

Get it Fast...specify AIR EXPRESS



If you want your orders shipped *fastest way*, be sure to specify "ship AIR EXPRESS"—because general instructions such as "urgent" and "rush" may be misinterpreted by the shipper.

And it's especially important to specify AIR EXPRESS if your shipment is vital to a war job, because it saves something like 75% of the hours and days consumed over the next fastest means of shipping. This 3-mile-a-minute service is available direct to more than 350 U.S. cities and to scores of foreign countries.

AIR EXPRESS RATES REDUCED

As a result of the great volume of Air Express traffic created by wartime demands and the increased efficiency developed to satisfy these demands...Air Express rates within the United States have been substantially reduced, in some instances as much as 12½%, depending on the weight of the shipment and the distance it moves. Consequently, shippers nationwide are now saving an average of 10½% on air cargo costs.

NOTE TO SHIPPERS: *Ship Early*—as soon as shipment is ready—to assure fastest delivery. *Pack Compactly*—to conserve valuable space.

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Representing the AIRLINES of the United States

Latest aircraft bottleneck: Plumbing.

One company has told Washington it can't meet production schedules unless equipment for women's rest rooms is made available. Without it company can't hire necessary women workers.



Each Bradley takes the place of 8 to 10 "single-person" wash basins—reduces piping connections by 80%.



Give YOUR Employees Adequate and Sanitary Washing Facilities

Providing washing facilities for women workers can be easily accomplished with Bradley Washfountains. These group fixtures widely used by all industry, serve clean running water to 8 to 10 persons simultaneously. Physicians say that adequate sanitary washing is a well recognized preventive for skin affections and thereby saves lost hours and days of production.

Extra employees require added washing facilities so that the benefit of their labor can be used to the maximum,—with less time wasted in the washroom, and less absenteeism. Bradleys serve greater numbers in less space and encourage regular and proper washing. An ounce of prevention is worth a pound of cure.

Is your plant adequately equipped with sanitary washing facilities? Do you require additional washrooms for women employees? Then write for New Catalog 4308. . . . BRADLEY WASHFOUNTAIN CO., 2205 W. Michigan Street, Milwaukee 1, Wisconsin.

BRADLEY Washfountains



Just off the press — Cat. No. 4308.



Preparing Postwar Jobs in the Dark

(Continued from page 30)

\$12.09 a share for 1942. After renegotiation, the figure was \$7.28. Another reported \$3.29, but the renegotiated figure was \$2.70. A steel company reported \$6.23 per share and ended up with \$4.30. A building contractor reported \$9.46 and wound up with \$8.80.

Here is a situation which, if designed to drive capital from the market, hardly could prove more effective. The whole structure of the SEC was reared on the theory that stockholders are entitled to complete and fully credible reports from management; yet, in renegotiation, government itself has interposed a device which makes accurate reports a physical and mathematical impossibility.

Every industry has presented particular problems arising from renegotiation. In some, the war machinery is easily adaptable to peacetime pursuits; in others, the war machinery is junk when war orders are finished. One industry operates in a low excess profits bracket, another in the top rung. Every industry has endorsed elimination of excessive profits. The only petition to Congress has been for a method which will enable management to plot its course from year to year on a sure and certain financial footing.

In machine tools, for example, the National Machine Tool Builders Association declares:

"Renegotiation, as at present administered, actually threatens the industry's post-war survival. . . . If the machine tool builder feels that the demand is excessive and declines to sign the agreement prepared by the Price Adjustment Board, he is told that the matter will be referred to Washington, with the threat that the parent board in Washington will demand even more."

Strong-arm tactics

CONFIRMING reports of intimidation and coercion by the local adjustment boards, Rep. Thomas A. Jenkins, of Ohio, recalled one case before the Ways and Means Committee:

"And when he appealed to those who were negotiating with him, they said to him, 'You had better not go down to Washington, because, if you do, you will get a lot worse deal than you are getting now.'"

Other shocking instances of intimidation have been spread upon the Congressional hearings—some of them involving strong-arm tactics almost unbelievable in the United States.

John B. Hawley, Jr., President of the Northern Pump Company, Minneapolis, told the Naval Committee how he had spent more than \$1,000,000 developing and perfecting a fool-proof hydraulic pump needed for steering mechanisms in aircraft carriers. On the basis of these and other personally held patents, he performed \$88,000,000 worth of Navy

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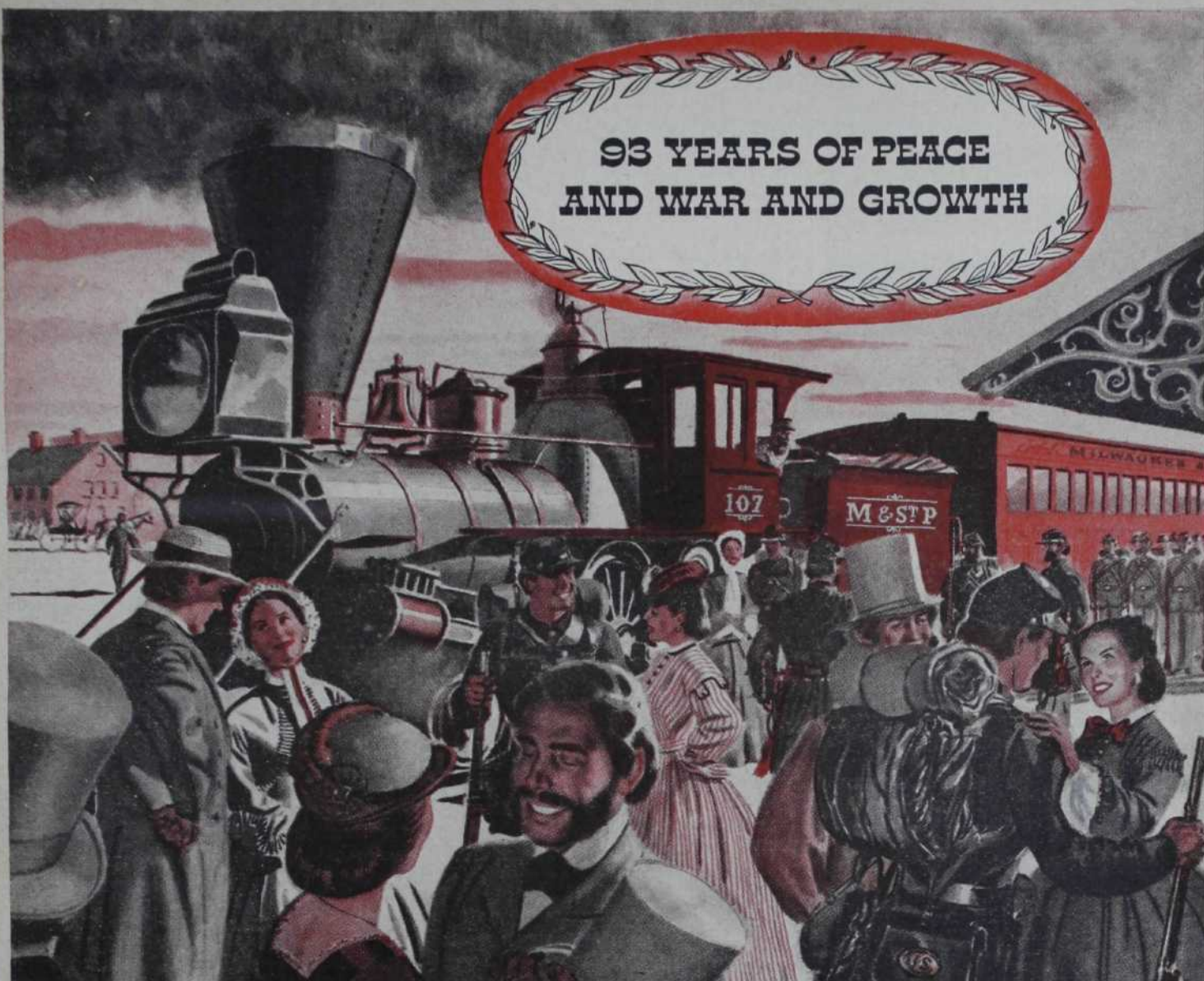
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Leading builders of construction machinery, oil-well drilling and pumping rigs, orchard spray rigs, and many other types of heavy-duty portable machinery—including Le Roi's own portable air compressors—equip their machines with Le Roi power units. Perhaps you can profitably do likewise — and enjoy the same reputation for dependable performance, low maintenance cost, and durability. 2 to 12 cylinders, 4 to 400 H.P.—for gasoline, natural gas, or butane.

Write for further information.

Le Roi Company
Milwaukee 14, Wis.





Scene in Civil War Days

THERE wasn't much of the present U.S.A. mapped in the geographies back on November 20, 1850, when the first train steamed forth on what today is part of The Milwaukee Road.

Many of our mighty cities of the west and northwest were then mere outposts. And eleven years were to pass before

the war between the States began.

The little five-mile railroad of 1850 has grown into an 11,000-mile transcontinental transportation system. Through wars and rumors of wars, depressions and years of great development and prosperity, The Milwaukee Road has written its share of American history.

Today all that our free America means is being challenged. And we of The Milwaukee Road, in concert with the rest of the nation, are helping to fling back that challenge.

We are being called on to move more and more freight and passengers every day. We are keeping vital war traffic flowing uninterruptedly over our long supply line from the east and middle west to Washington and Oregon ports—and through the Omaha and Kansas City gateways to California and Texas ports.

Our friends and patrons—both passengers and shippers—are co-operating to the limit. They, as well as we, know the urgency of the situation and the importance of the job we all have to do.



THE MILWAUKEE ROAD

11,000-MILE SUPPLY LINE FOR WAR AND HOME FRONTS

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2. To increase sales volume...
3. To dominate competition...
4. To widen your trading area.
5. To make more money.....

Plan to remodel your store with a new Pittco Store Front

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store fronts

FOR ALL-TIME PERFECT SHAVING- PERSONNA

Precision Double Edge Blades



10 for \$1
and worth it

Your shave is perfect every time, because every blade is perfect—hollow-ground by Master Cutlers, put through 17 inspections, and carefully leather stropped. Fits your double edge razor perfectly.

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Fine as a Rare Jewel

If your dealer can't supply you, write to Department E, Personna Blade Co., Inc., 599 Madison Avenue, N. Y. C.

contracts in 1940, '41, and '42. These operations showed an overall net, after taxes, of \$7,328,000, or 8.32 per cent of sales. (Naval hearings, p. 636.)

Then renegotiation hit him. The final settlement was a refund of \$16,000,000 to the Government, leaving a net, after re-calculated taxes, of approximately two per cent on sales. He had twice been awarded the Navy "E" for production.

But what of reconversion costs? He carried 10,000 men on the pay roll. With their families, some 50,000 persons looked to him for postwar livelihood, he told the committee.

The military services have presented elaborate statistical tabulations showing billions recaptured, plus additional billions saved on re-pricing. But the Ways and Means Committee asked for figures on 100 specific contracts, after renegotiation had been completed. The results were presented by Kenneth H. Rocky, Chairman of the Navy Price Adjustment Board. Combined net before taxes was \$1,062,968,600. Federal corporation taxes alone would have caught 73.9 per cent of these profits, without renegotiation.

But renegotiation actually recaptured 10.4 per cent more—a total of \$110,747,700. These figures appear to offer at least a compelling argument for renegotiation after taxes, rather than before. Why all the renegotiation toil, sweat and tears over the \$750,000,000 the Government is going to get anyway?

Personal income taxes, moreover, would have taken another 15 or 20 per cent of the original profits prior to renegotiation; and personal income taxes in the States would have taken another three or four per cent, perhaps more. Allowing 25 per cent for personal income taxes, the ultimate net recovery by renegotiation on approximately \$12,000,000,000 of contracts (gross sales), was about \$83,000,000, over and above what would otherwise have gone for taxes.

Crucial postwar problems

YET these calculations leave untouched the crucial management problems of postwar reserves, conversion losses, continuity of employment after war contracts. Nor do they consider administrative costs for the long and tedious computations and presentations of the Government's renegotiating officers. Last but not least, they take no account of the wear and tear on management—trips to New York, trips to Chicago, to Washington, to San Francisco; long-distance calls to the price adjustment boards; special accountants, reports, calculations, forms; attorneys; distraction from production problems; extra executive hiring to carry the government negotiations.

On balance, the whole thing would come pretty close to washing out after taxes. Yet the official report of the Navy shows, for these 100 contracts, recapture of roughly \$500,000,000 by renegotiation! (Ways and Means hearings, Sept. 10, 1943, p. 148.)

Great Britain has come through more than four years of war without a renegotiation law. In her procurement pro-

STENCILS DO THE JOB BETTER ... FASTER

Today it's vitally important that *all* shipments reach their destination



speedily. To safeguard against delays, shipments must be clearly, legibly marked. MARSH Stencil Equipment is the answer. Your inquiries are invited. No obligation.

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72 MARSH BUILDING
BELLEVILLE, ILL., U. S. A.



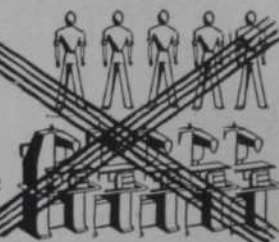
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STENCIL MACHINE

With this NEW
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invented by US,
ONE MAN



now does the
work of—

**FIVE
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STANDARD
AUTOMATIC
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AN 80% SAVING IN MANPOWER
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know if their parts can be made
faster and better for less.

Just send name & title to



U.S. Automatic
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AMHERST • OHIO

Business Boners



"No one in this organization is indispensable"

YOU'VE heard this many times. Sometimes it's true. Sometimes it's not. It depends on the business and the man. At any rate, it's expensive to generalize, and smart to be prepared for anything.

The really indispensable part of an up-to-date organization is business life insurance sufficient to cover losses through death of key men. Northwestern Mutual has written this sensible protection for many of America's leading organizations in amounts proportionate to the salaries involved. Such protection does not

cancel out the loss of the men, but it does help finance the interim adjustments of personnel and other expenses.

The cost of this protection is surprisingly low and has a secondary advantage . . . it assures the accumulation of a special surplus through the cash value of the policies, if the men live.

Now, as a business man, you will want to make the very best life insurance investment. Then, remember, that the difference between life insurance *companies* is significant. Before you take action, do two things . . . (1) see a Northwestern Mutual agent; and (2) check with any of our policyholders, for they can tell you, better than we can, why no company excels Northwestern Mutual in that happiest of all business relationships . . . old customers coming back for more.



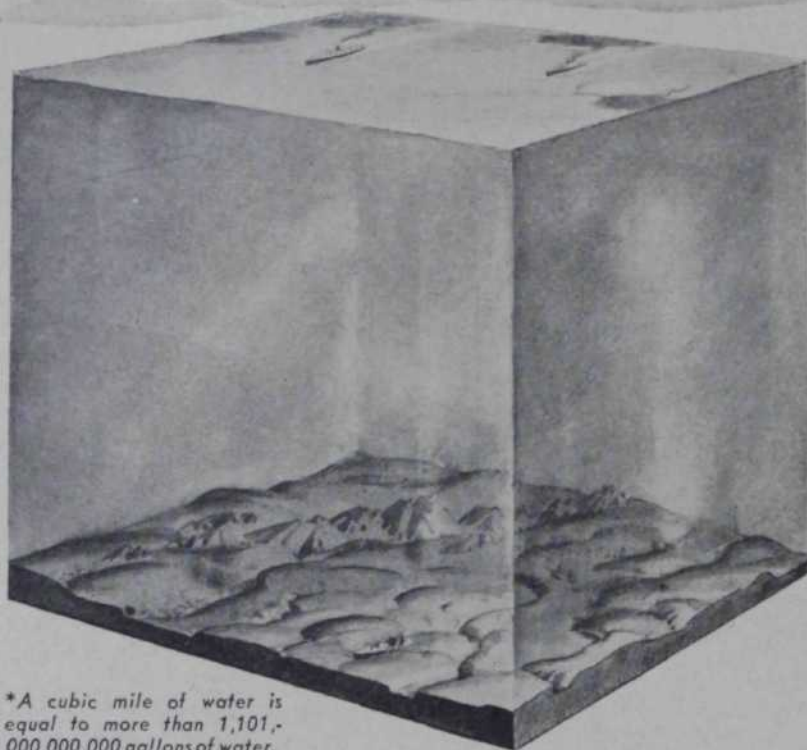
The **Northwestern
Mutual**

Life Insurance Company

MILWAUKEE, WISCONSIN

WANT A CUBIC MILE OF WATER?*

—see Peerless



*A cubic mile of water is equal to more than 1,101,000,000,000 gallons of water.

That's a fantastic amount of water—more than eleven hundred billion gallons—but ten giant Peerless Hydro-Foil Pumps could do this job. Maybe you only need 10 gallons a minute. There's a Peerless Hi-Lift Pump that will produce this amount, too. So, regardless of the capacity of water you need, Peerless has a pump for the job. Peerless Pumps are made in a variety of types, with oil or water lubrication and any power drive to pump water from any depth. Literature upon request.

PEERLESS PUMPS

TURBINE, HI-LIFT AND HYDRO-FOIL



PEERLESS PUMP DIVISION of Food Machinery Corporation

FACTORIES: Canton, Ohio; Los Angeles, San Jose, Fresno, Calif. Service Offices and Sales Agents in Principal Cities

gram she seeks, as a matter of policy, to negotiate prices which will yield a profit after taxes, of approximately 7.5 per cent on the capital employed. But without exception, British policy has left to taxation, rather than renegotiation, the recapture of excessive profits.

By this program she has avoided a vast and costly administrative bureaucracy for renegotiation. She has conserved the human resources of management, and has eliminated a host of conflicts and irritations introduced in the American war effort by the pulling and hauling of renegotiation to the third decimal. More important, she has avoided the restraint upon efficiency which renegotiation imposes.

What incentive for plant improvement and efficiency remains if every contractor knows that each such move makes more certain the ax-blow of punitive renegotiation?

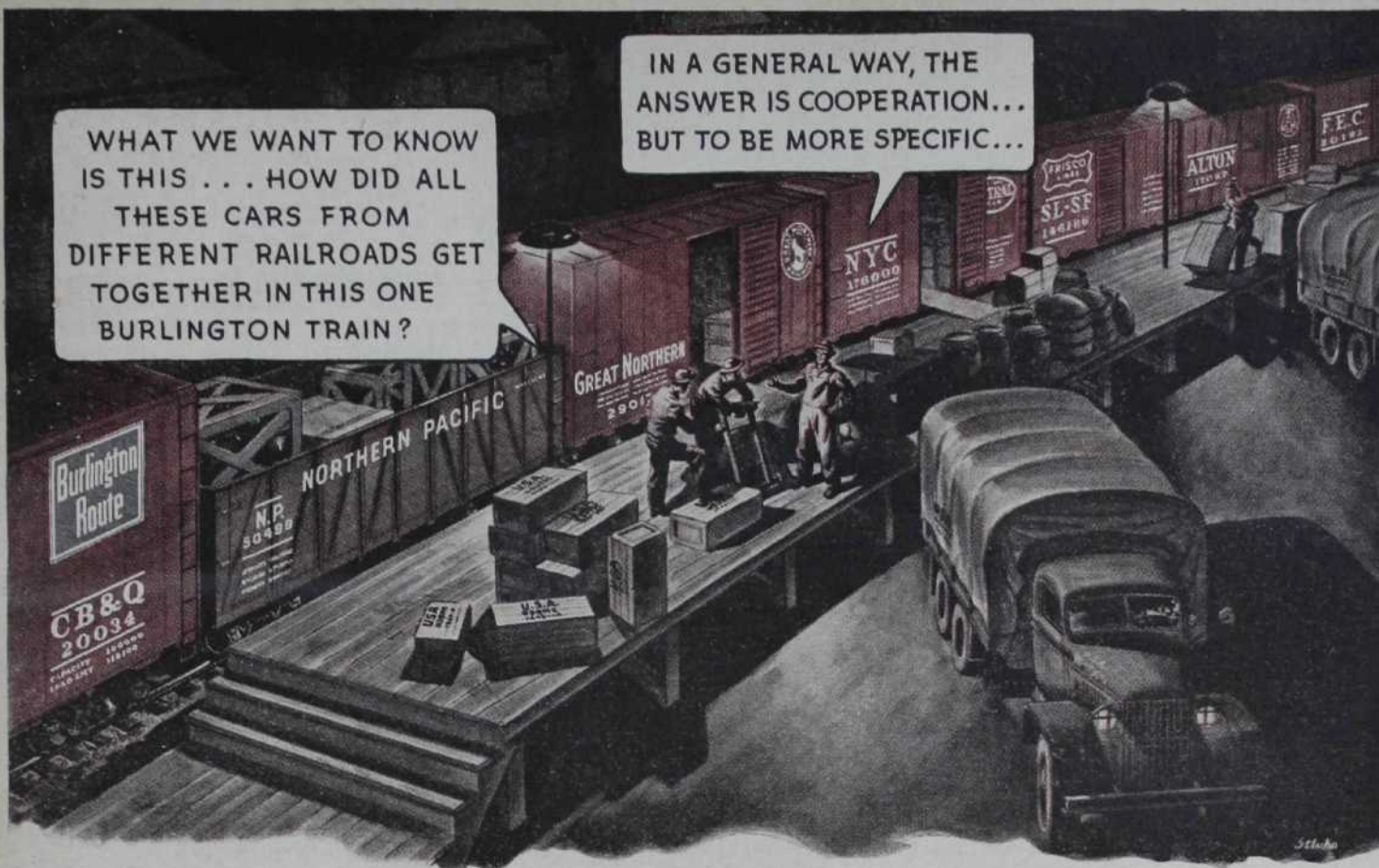
Six recommendations

IN summary, the testimony before the three Congressional committees reduces to six guiding recommendations by industry for prompt revision of the law:

1. Excessive profits should be recaptured through tax policies which fall equally upon all industries and all types of producers.
2. The meandering delegation of unlimited powers to administrative offices should be curbed to eliminate intimidation, coercion, and duress against management.
3. Adequate cash provision should be made for postwar reconversion and continuity of employment.
4. No recapture device should be retroactive beyond the first of the calendar year of enactment; and a statute of limitations should be fixed so that contractors may be protected against all claims after a reasonable interval from completion of the contract.
5. In recapture programs, normal profits should be defined in the same terms as in the revenue code.
6. Recapture should begin after computation of federal taxes; should be accomplished through fixed published procedures; and should be subject to judicial review as to both law and fact.

These are traditional considerations of American policy so elemental as hardly to require definition. Yet hundreds of appeals to Congress appear to demonstrate that such fundamental precepts of Americanism have been violated daily in the arbitrary conclusions and dictatorial demands of our far flung renegotiation boards.

Indeed, few in America realize that these hundreds of federal officers have been operating for 18 months under a law which defines excessive profits as "any amount of a contract or a sub-contract price which is found, as a result of renegotiation, to represent excessive profits."



Railroader—Take a look at the map at the bottom of this page. See all those lines? They're railroads. The red lines are the Burlington and the black ones are a lot of other railroads.

1st Soldier—The red lines hook up with the black lines in every direction, don't they?

Railroader—Yeh, and that's why you see the cars of so many different railroads in every Burlington train. You see, the Burlington is a link between railroads from the North, East, South and West. It serves 22 major gate-

ways and has more than 200 places in its territory where cars are switched from one railroad to another.

2nd Soldier—The railroads must be playing mighty fast ball these days. I understand they're moving lots more freight now than they did during the last war.

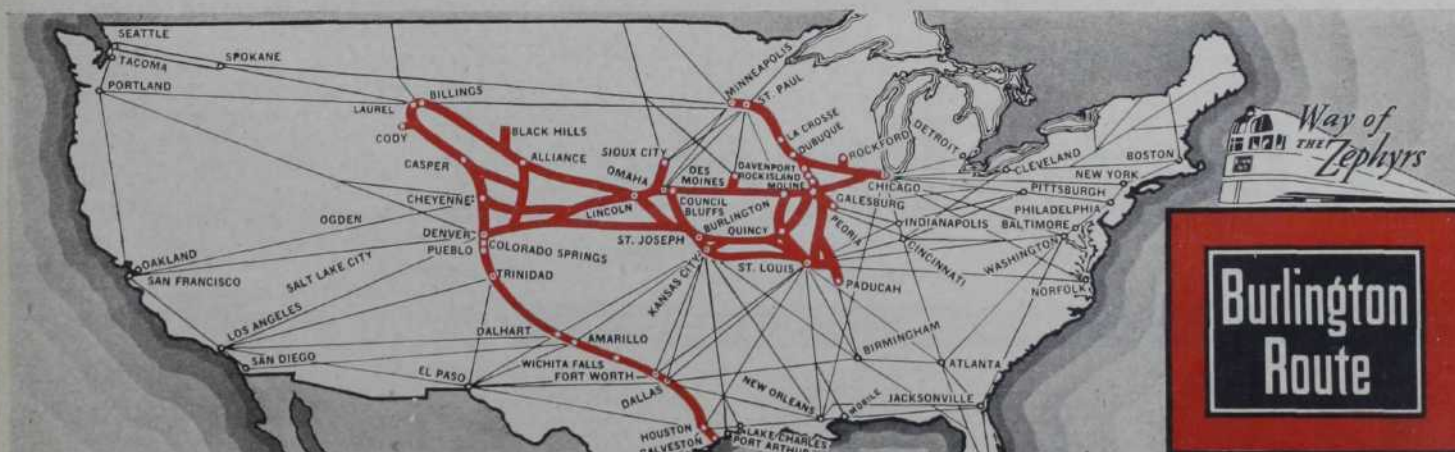
1st Soldier—That's right, and I read the other day that they're doing it with lots less cars. How can they do that?

Railroader—Well, you can throw your bouquets to a lot of different folks on that score. The railroads

have done a real job of getting every ounce of service out of every train. And don't forget the shippers. They're the boys who are cooperating where it really counts—in fast and full loadings, in smart routing and in speedy unloading and releasing of cars. Incidentally, the biggest shipper today is your Uncle Sam.

2nd Soldier—Sounds to me like another case of everybody working together to do a job that no one of them can handle alone. That's cooking American style, isn't it?

You're right, soldier, and the Burlington is proud to be among the railroads who have teamed up with an army of shippers, in handling the biggest freight transportation job in history. Private enterprise always has and always will thrive on tough assignments. Both the Interstate Commerce Commission and the Office of Defense Transportation have been on the job, too, with constructive wartime regulations.



AN ESSENTIAL LINK IN TRANSCONTINENTAL TRANSPORTATION



THOUSANDS OF MILES FROM ANY FRONT BUT WAR HAS RAVAGED *Highway A!*

MUCH highway maintenance and construction must mark time for the duration. Available manpower, material and equipment can be utilized only for maintenance of roads that serve as transportation arteries between military and industrial centers.

Time, weather and the neglect enforced by war will exact their penalties on many fine highways. War's end will begin a nation-wide job of road rehabilitation. Cleaver-Brooks equipment will be of important aid to highway engineers in setting and keeping a fast pace in road reconstruction and building.

Heating the necessary tar and asphalt to the proper temperatures for application to prepared road surfaces can be a slow, tedious task, but Cleaver-Brooks portable bituminous heating equipment makes it a swift, continuous operation — economically accomplished.

Right now Cleaver-Brooks bituminous heating equipment is being built for war assignments — building the network of airports and flight strips needed for military aviation. After Victory such equipment and other Cleaver-Brooks products will resume their work serving peacetime needs.



Truck-mounted Portable Pumping Booster used in airports, flight strips, and road construction and maintenance.

Cleaver-Brooks

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★ CLEAVER-BROOKS PRODUCTS INCLUDE: ★



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Special Military Equipment

We Tour the Home Front

A glass sandwich, plastic filler made by Monsanto Chemical Co., between two layers of camouflaged cloth, keeps U. S. Marines snug and dry in dripping jungles or bivouacs.

25 per cent of world's silver production is being flattened into protective sheathings for airplane engine bearings.

New smoke generator developed in General Electric's Schenectady research laboratory, helped reduce casualties in Sicily by hiding troop movements.

Women fire fighters are being trained by Chino, Calif., fire department. Oregon's State Highway Department is hiring women maintenance workers.

\$600,000,000 was saved the Government in construction costs alone by improvements in explosives manufacture worked out by duPont Company technicians.

17,000 airplane castings may be inspected in 24 hours by an X-ray machine developed by Westinghouse Electric Manufacturing Co.

Lost local knowledge of 35,000 postal workers now in armed services can't be replaced quickly. Use Postal Unit Delivery numbers for designated cities to facilitate mail delivery!

Hot air, 300 cubic feet a minute, is delivered by a unit heater occupying one-fifth of a cubic foot, weighing eight pounds, which the Selas Co., Philadelphia, designed for aircraft.

1,000 per cent production increase by streamlining Navy fuse containers was made possible at American Can Co. plant—300 instead of 30 a minute.

438,000,000 pounds of motor trucks have been delivered to United Nations armed forces by Mack International Motor Truck Corp.

One bill to residential customers every other month is saving Los Angeles Water and Power Department about \$270,000 a year, easing manpower situation.

Charlotte, N. C., has announced a \$11,477,425 postwar public improvements program. Engineering improvements will include, among other things, construction of a road to the municipal airport.

Another discovery made in South America: Venezuela has a grass, "melinis minutiflora" which exudes an odor so obnoxious to reptiles that they will not stay around it. Even the blood-suck-

How

"Honesty Engineering"

helps prevent Loss of Personnel

NOT long ago a mid-west mercantile concern was suffering heavy manpower losses because of employee dishonesty. In one year alone, some scores of persons misappropriated company funds and were dismissed. Then U.S.F.&G.'s unique Personnel-Protection Plan was put into effect. Result: manpower losses due to dishonesty dropped 83% . . . another example of how "Honesty Engineering" helps stop employee dishonesty before it can start!

Today, employee dishonesty is a threat to employers great and small. For while fidelity insurance can repay your financial losses due to dishonesty, it cannot make good the loss of trained, hard-to-replace manpower.

It was to meet this problem that U.S.F.&G. developed its unusual Personnel-Protection Plan. The plan of "Honesty Engineering"

helps reduce employee dishonesty in much the same way that safety engineering and fire prevention work have reduced accidents and cut fire losses for American business.

Based on long experience in bonding employees, the Personnel-Protection Plan not only insures you against loss through employee dishonesty but: (1) discloses undesirable personnel and prevents waste in training; (2) through tested methods helps keep good employees from going wrong; (3) helps employers eliminate leaks, pitfalls and careless acts which often lead to employee dishonesty.

Your U.S.F.&G. agent will be glad to give you more information about how the Personnel-Protection Plan helps you keep your employees by keeping them honest. Consult him today.

Branch Offices in 43 Cities · Agents Everywhere

U. S. F. & G.

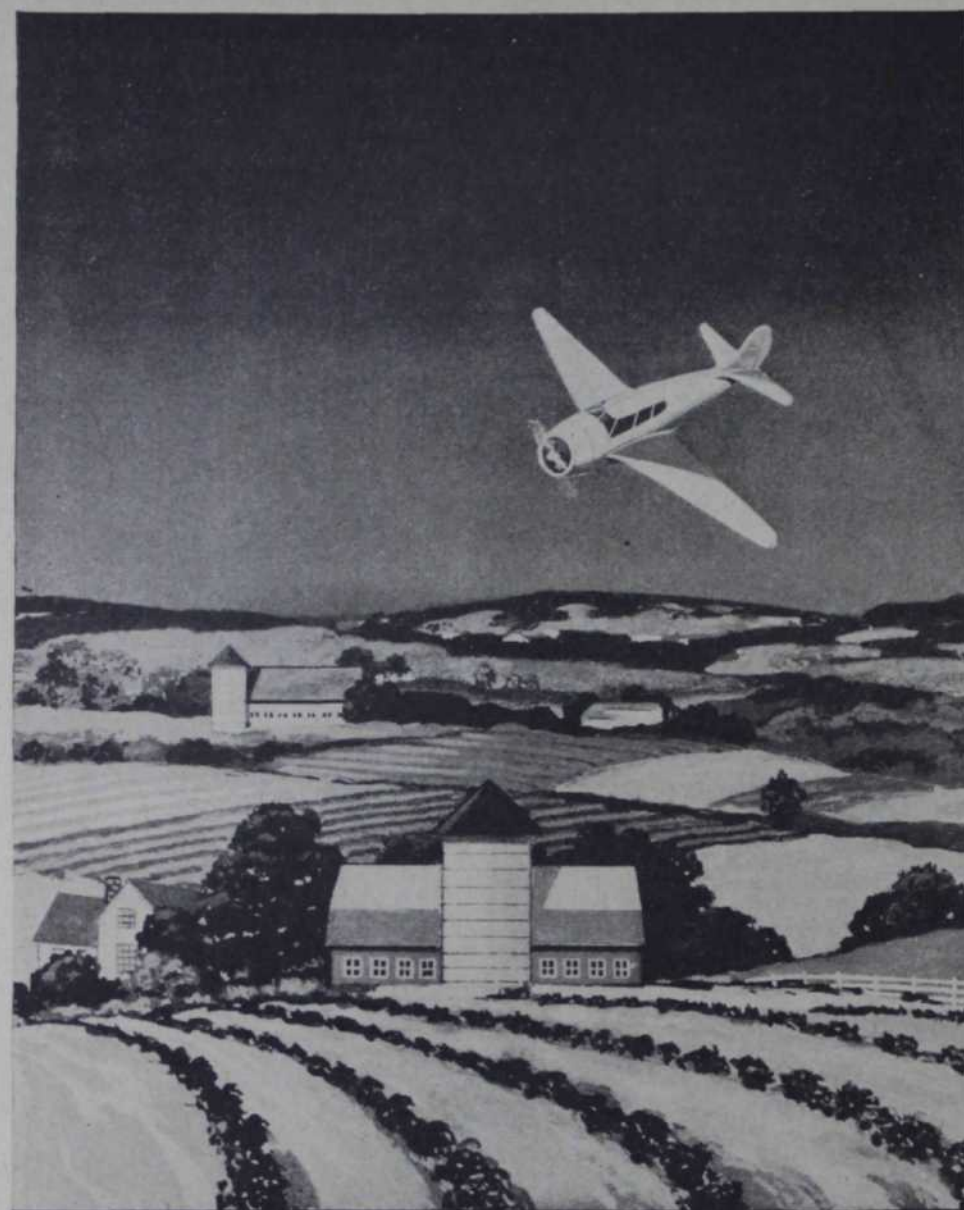
UNITED STATES FIDELITY & GUARANTY CO.

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FIDELITY & GUARANTY FIRE CORPORATION

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Consult your insurance agent or broker as you would your doctor or lawyer



HOME

Straight as an Arrow...

With the unconditional surrender of our enemies,—which must be won by our blood, sweat and toil—, will come peace and the post-war period of reconstruction and development.

Aviation, now the No. 1 industry of America, will continue to lead the way. From the centers of our great cities to the vast expanses of our rural sections, Airplanes will play a leading part in our lives. Distances between home and place of business will be of much less importance, as the speed and efficiency of Aircraft will make commuting practical and economical. You can go home straight as an arrow, from wherever you are.

Advanced engineering and foresight will continue Jacobs leadership in the production of dependable and economical Aircraft Engines—*practical engines* for the private owner, the business concern and the "feeder" Airline.

JACOBS AIRCRAFT
Engines
POTTSTOWN, PENNSYLVANIA, U. S. A.

ing ticks on cattle are destroyed after a few days of grazing on the fields planted with this grass. It is a rich fodder however, which cattle seem to enjoy.

A house an hour is record of David D. Bohannon, San Francisco builder, who built 700 three-bedroom homes in 700 hours.

4,000,000 pounds of waste fat were collected by the Great A. & P. Tea Co. in the first year of the drive, and its rate of collection has since doubled.

330 per cent increase in war production is reported by Eureka Vacuum Cleaner Co.

Phone calls are shorter, 50 per cent fewer as result of campaign by North American Aviation, Inc.

Jewel brokerage department is innovation by R. H. Macy & Co., New York department store, which will appraise customer's jewelry, sell it charging only brokerage fee.

Liberator bomber engines produced by Buick Motor Division in fourth quarter of 1943 will outnumber entire production of 1942.

A miniature motor (ten horsepower, 125 pounds) developed by Remington Rand for auxiliary work lights and communications in bombers will be pushed for use in homes and on ships after the war.

First Wasp engine was built 18 years ago. Pratt & Whitney Aircraft Division of United Aircraft Corp. recently celebrated shipment of the 100,000th.

Silver cup was gift of Nitro, West Va., plant of American Viscose Corp. to every employee after plant set record of 270 days without lost time accident.

Steel roadway sponsored by Irving Subway Grating Co. and town of Darien, Conn., will determine practicality of this construction, may point way for postwar highway builders.

To correct uneven riveting, one of the chief causes of faulty airplane construction, a "riveting robot" has been developed by Willys Overland Motor Co., Inc., Toledo, O. The new device can be attached to any standard riveting gun and used to control automatically the number of blows applied to rivets.

Sales by general merchandise stores in the first half of 1943 set a record by establishing an annual rate of ten billion dollars, the Commerce Department reports.

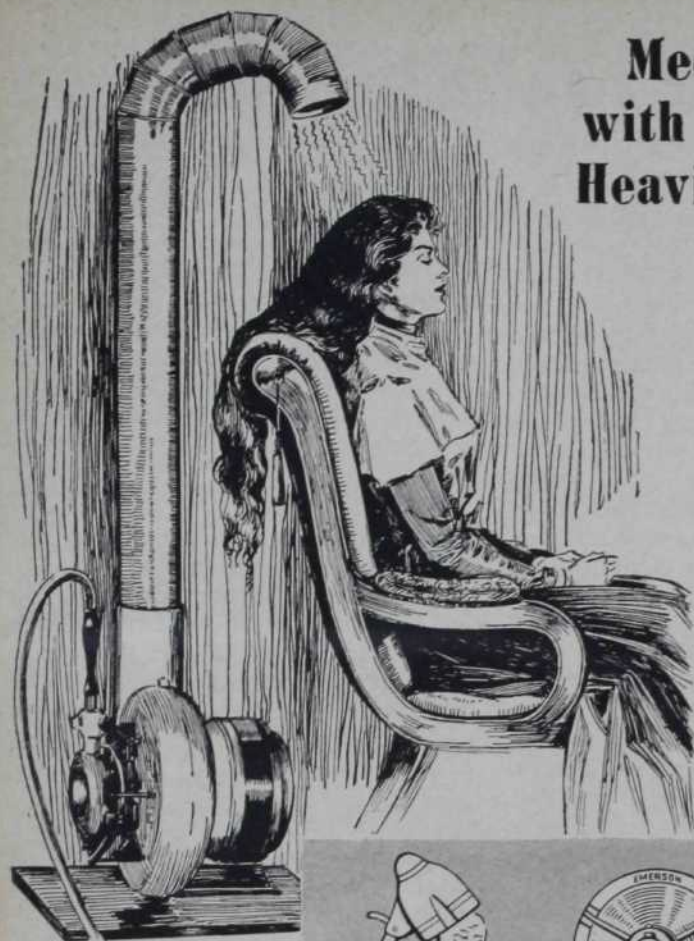
A robot metallurgist which evaluates and automatically sorts metals from alloys with uncanny precision is one of Allen B. Du Mont Laboratories, Inc., major contributions to the war effort.

Mechanical Hair Drier*, Powered with *Emerson-Electric Motor*, Dries Heaviest 'Suit' of Hair in 10 Minutes!

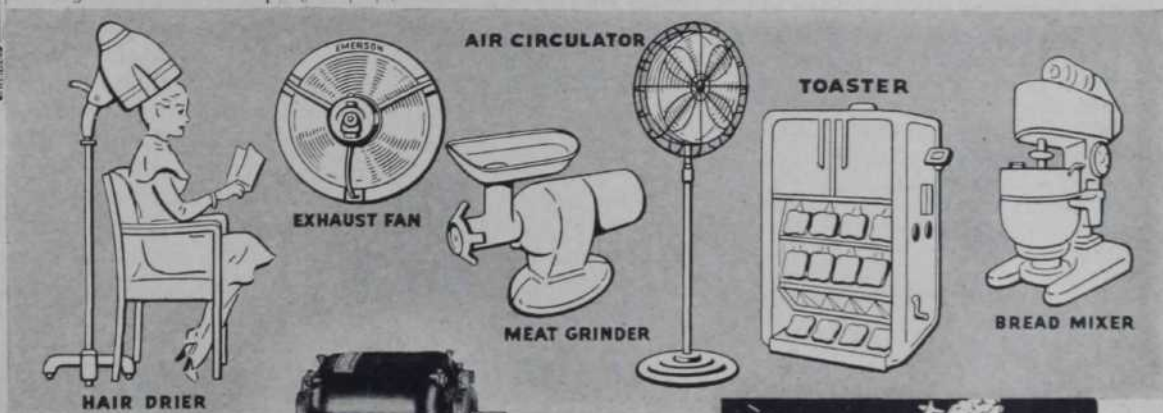
This Startling Invention of 1898 Pioneered Another Great American Industry

By the ingenious combination of a gas burner and electric motor-driven blower, heated air was forced through a pipe to the desired elevation. Women marveled at the time saved in drying their hair. The news spread, more shops were opened. Today, a nation-wide industry of equipment and supply manufacturers, distributors and beauty salons serves the women of America.

This is but one of many instances where Emerson-Electric has kept pace with the development of appliances and equipment from inception to their present-day utility.



* This device was made for Mr. A. F. Godfrey, of St. Louis, an internationally-known authority on beauty culture. An Emerson-Electric announcement of 1898 says "It will dry perfectly the heaviest suit of hair in ten minutes."



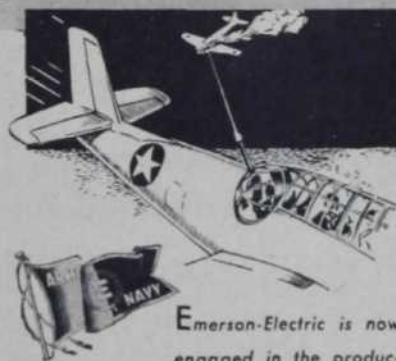
Whenever you visit "the butcher, the baker, the candlestick maker," you'll be better served by time-saving appliances, and equipment provided for your comfort, powered by Emerson-Electric motors.

The War Bonds You Buy Today Will Pay for the New Appliances and Comfort Conveniences You'll Want After Victory

The expanded war activity of Emerson-Electric has created a new and vastly enlarged field of manufacturing operations, particularly in light metals and plastics. . . . This—added to the experience of more than half a century in the precision manufacture of motors, fans, appliances, and arc welders—will be reflected in the Emerson-Electric products of the future.

"After Victory" manufacturers of new and improved motor-driven appliances and equipment will again confidently power their products with Emerson-Electric Motors, based on the latest conceptions of design, construction and efficiency.

THE EMERSON ELECTRIC MANUFACTURING COMPANY
SAINT LOUIS . . . Branches: New York • Chicago • Detroit • Los Angeles • Davenport



Emerson-Electric is now engaged in the production of power-operated revolving turrets for United Nations' Bombers, electric motors for aircraft control, shell parts—also electric fans, motors and welders authorized by government priorities.

EMERSON ELECTRIC

MOTORS • FANS • APPLIANCES • A. C. ARC WELDERS

NATION'S BUSINESS for November, 1943



YOUR No. 1 WAR



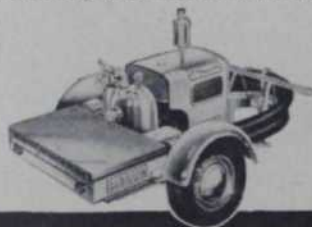
Wasn't it a shock to learn that U. S. fire losses during the first two war years were 50% greater than total war damage in Britain in that time? Your plant could be the next "other fellow" to whom

those things always happen.

It's time right now to make a quick move in this, your No. 1 war. Start by learning all about LaBour Fire Pumps for industrial use. These foolproof, dependable and low cost units put teeth into your fire protection set-up.

If you're interested in having your plant able to defend itself, write today for complete information and prices on LaBour Fire Pumps.

THE LABOUR COMPANY, Inc.
1605 Sterling Ave., Elkhart, Ind., U. S. A.



LABOUR PUMPS

The Railroad Saga

• • • The stupendous achievement of the American railroads is one of the sagas of the present war. The peacetime achievements of the railroads are no less colorful and interesting. The story of railroad operation and accomplishment is a part of the American scene which no well-informed man can afford to overlook. TRAINS Magazine tells this story accurately and interestingly with plenty of excellent photographs and informative maps. Subscribe now (\$2.50 per year) to TRAINS, the magazine of railroads and railroad travel. Know more about your America.

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1044 N. Seventh St., Milwaukee 3, Wis.

Exhibit Cuts Absenteeism

OUT working on a War Bond drive in Knoxville, Tenn., not long ago, Charles P. Tombras, a local advertising man, was struck with how little the citizens seemed to know about the part their city was playing in defeating the Axis. Only one person out of every 12 with whom he talked could name more than three of Knoxville's war industries or the products they were turning out.

"If the men and women could only see for themselves what we are actually doing here in this community," thought Mr. Tombras, "it would increase their civic and patriotic pride and perhaps inspire them to contribute more wholeheartedly to the war effort."

Result was that Mr. Tombras hit on an idea for a photographic exhibit of the local war plants in action. Joe L. Parrott, photographer and sign painter, went through the factories and made more than 200 pictures, photographing everything of interest except certain secret products and methods.

After the pictures were approved by the Bureau of Public Relations of the War Department in Washington, they were blown up, mounted in panels, suitably labeled and put on display in the Knoxville Power and Water Board building.

The exhibit was eight feet high and 120 feet long—and represented 52 different plants. In some cases, samples of the actual finished products were shown. To give workers on the day shift an opportunity to visit the exhibit, it was open evenings as well as during the day.

Facts by loudspeaker

FROM time to time, a broadcast from the floor pointed out that:

"Since Pearl Harbor, about 90 per cent of Knoxville's industries have quietly converted from peacetime operations to all-out production of war materials. Shops and factories, large and small, men, women and machines have stepped up their tempo to meet a new demand in our nation's supreme effort to beat our ruthless foe. Today, thousands of items needed for shipyards, aircraft, ordnance and other war industries are being speeded to the assembly lines through the efforts of Knoxville war plants."

The display is credited not only with increasing the sale of War Bonds in Knoxville but also with helping cut down industrial absenteeism.

—WARNER OGDEN



A view of the display which stepped up Knoxville's civic pride by "taking the citizens on a tour through the local war plants"

House Doctor . . .

THE WAR hit this home-builder's business hard but he found a way to get all the repair work he could handle

STUART FONDE, enterprising young Knoxville, Tenn., contractor, head of Fonde Construction Co. and the Builders Supply Co., was becoming nationally known with his home building ideas—when the war came.

Fonde claimed to be the first in the nation to build a fully insulated low-cost home, first in his section to develop low-cost, smokeless communities. He built entire communities of low-priced, quality homes.

The war hit home construction hard. It might have floored many a contractor accustomed to doing work on a big scale. But Stuart Fonde decided on an experiment. He converted one of his trucks into a completely equipped traveling repair shop. On the side he had painted:

If Your Home is Sick
Call The House Doctor
2-9691
All Kinds of Home Repairs

He advertised complete home repair service, including floor sanding and refinishing, roofing, painting, home insulating, remodeling, and miscellaneous repairs.

Results: Fonde soon had all the business he could do.

Knoxville and Memphis newspapers editorially praised the idea.

The Memphis *Press-Scimitar*, more than 300 miles from Knoxville, in an editorial headed "The American Way," had this to say:

"What does a man do when the war puts him out of business?

"When a Knoxville builder (Stuart Fonde) saw war-time regulations curtailing the business of building homes, he didn't lose any time cussing the Government or even the enemies of our Government.

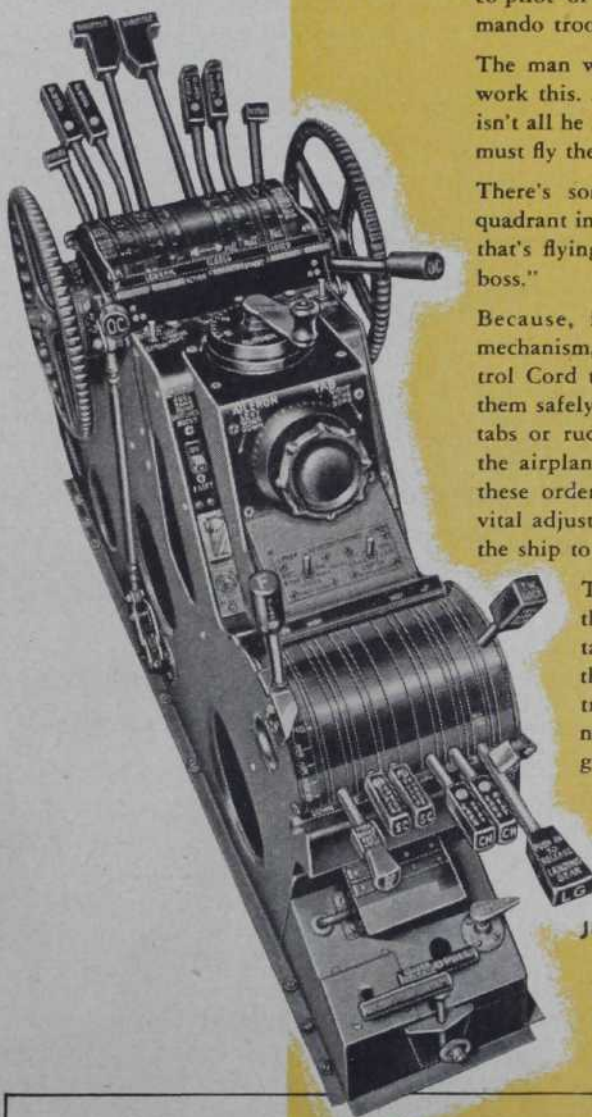
"He built a huge home repair shop on wheels, equipping it with lumber, brick, hardware, screens and even a power-driven cutting machine. He didn't wait for business to come to him; he advertised and went after it.

"It looks now as if he will have all the business he can handle. We hope so because he has the American way of meeting changes."

—WARNER OGDEN



Meet "The Boss"...



This is called the control quadrant. You'll find it between the pilot and co-pilot of the giant Curtiss Commando troop carrier.

The man who flies the ship has to work this. All of it. Mind you, that isn't all he has to do. In addition, he must fly the airplane.

There's something similar to this quadrant in every warship of the sky that's flying today. We call it "the boss."

Because, from this complicated mechanism, Roebling Aircraft Control Cord takes orders. And carries them safely to flaps or carburetor or tabs or rudder or wherever else in the airplane's complicated structure these orders are directed. Makes a vital adjustment in flight, or readies the ship to land, or take off.

Taking orders and carrying them out is pretty important in this war. And, of the millions of feet of control cord we have made, not an inch has ever been guilty of insubordination.

**JOHN A. ROEBLING'S
SONS COMPANY**
TRENTON 2, NEW JERSEY
Branches and Warehouses
in Principal Cities



ROEBLING

P A C E M A K E R I N W I R E P R O D U C T S

Wire Rope, Strand, Fittings Division
Aircord Division
Electrical Wire Division

Round, Flat Wire Division
Woven Wire Fabric Division
Suspension Bridge and Cableways Division

The Duke Went a-Banking

(Continued from page 27)

politics of the day frequently involved themselves in such personal matters. Hence, on a night when the guards were conveniently elsewhere, a cloaked and muffled stranger entered his cell, ordered Law to dress, threw a cloak about him and commanded him to follow.

The way led to a Dutch ship bound for

tion service and the speed with which it brought to him price-affecting news from the world centers.

Law wrought in his own mind this principle:

"Money plays in the State the same part as is played by the blood of the human body. The moment its course is checked it can no longer carry on its

AMONG the innumerable calamities which ordinarily cause the downfall of kingdoms, principalities, and republics, there are four, which according to my opinion are the most dangerous ones: discord, great mortality, sterility of the soil, and the deterioration of money.

The evidence of the first three is so great that nobody does ignore them. But as regards the fourth, concerning money, very few, some men of great ability excepted, take any interest in it. This, because it ruins the State not at once, but by small degrees, by an action which is in a certain sense hidden.

COPERNICUS in a report to King Sigismund of Poland, 1526

Amsterdam. The only other passenger was a Dutch banker—and Law, his other avenues of learning being closed, became an intensive student of money.

Amsterdam with its famous bank was the great center of commerce. Law concluded that Holland, with its slender natural resources, was thriving only because the Bank of Amsterdam provided a stable money in whatever quantity needed, while other lands with much greater resources had no single reliable means of exchange.

He studied the workings of the bank trying particularly to discover if it really had in its vaults the bullion to cover all the notes it issued. He was assured everywhere that it did but no one really knew, because the bank issued no statements. Law cannily noted that it was not what the bank had but what it was believed to have that mattered, and that confidence in its integrity was the bank's chief asset.

Law also learned about speculation. He was impressed by a banker friend's stories of the mad tulip boom of many years before and profoundly noted the banker's remark that only a few asked to see the tulips they were wildly buying and selling and he doubted if there were as many tulips as were traded in.

Finally he learned that, although the bankers presumably made their money out of trade, the rich ones earned their money by buying low and selling high, acting, not through superior wisdom, but through superior information—and that a banker's largest asset was his private informa-

tion service which is to circulate."

He saw the virtues and the faults of the Dutch system and worked out a system which he believed would bring prosperity to any country that adopted it.

He proceeded to Paris with the intent of offering his services to Louis XIV. He found, somewhat to his surprise, that, although France was prostrate and un-

doubtedly needed help, its condition was not displeasing to a ring of money lenders who were keeping the Court supplied with funds and making an exceedingly good thing out of chaos. Law revived his neglected studies in gambling and in love with such success that he was ordered out of France.

Then he began his Grand Tour in style, neglecting only Spain and Russia. He particularly studied Venetian banking, concluding that, on the whole, it was better than the Dutch.

In September, 1715, Louis XIV died. Law hurried back to Paris to offer his services to the Regent, the Duke of Orleans. Law exactly knew the condition of France and believed that only he could rescue it.

Staying in office in the style to which he had accustomed himself had caused King Louis to need immense sums of money which his money-lending friends provided. They forced loans and serviced them with worthless paper money. They taxed, they devalued and they confiscated, with the result that, when the Regent took over, France, although much the richest country in the world, was prostrate and the poor in the cities were starving because the farmers would not trade the food they raised for worthless paper.

The Regent was far from being a fool, but he had his own political aims and, instead of adopting a policy or even trying to understand one, he tried to please the factions which he thought would be most useful.

He listened carefully to Law and then let the lending ring go ahead with a great paper money refunding operation. No one was fooled and the fresh issue immediately went to a 40 per cent discount. John Law perceived that he had erred in trying to make a politician understand money. He again brought his plan before the Regent and offered to set up the bank with his own money. But also, in deep confidence, he whispered that he planned also to establish a trading company—separated from but operating through the bank—which would take over the public debt, abolish taxes and make the Regent the wealthiest ruler in the world. The Regent wanted details. He

got them.

When Law left, he had the authorization to open a bank with his own money and to issue notes that would be legal tender. The bank opened modestly in 1716. It was a bank of discount and received no deposits.

Law would not run the chance of having notes default and depositors unexpectedly call for money at the same time. His bank notes specified that they would be redeemed in bullion of the same weight and fineness as of the day of their issue.

Within a few months, the Law notes were circulating at a 15 per cent prem-



Law said that gold would be devaluated, and in came a flood of gold

ium above specie, while the State notes were at a 78 per cent discount. Law, with his mathematical mind and his gambling experience, had decided on a full bullion cover and he asserted freely that any banker who circulated notes with less than a complete gold cover ought to be publicly hanged.

The bank provided the first stable medium of exchange that France had known in many years and also the first relief from usury, because Law discounted paper at three per cent against the prevailing rate of 30 per cent. Trade began to revive and soon the whole country was enjoying a solid prosperity.

The Regent was so pleased that he suggested that the bank was so important that it ought to be taken out of private hands and become an arm of the State. Law resisted as best he could, because he knew what would happen if the political hand got into his coffers.

In August, 1717, he launched the West India Company with a capital of 100,000,000 francs. It took over the worthless Louisiana holdings and added to them the exclusive rights to the fur trade of Canada. Also it was a first step in the redemption of the public debt, because the subscribers were authorized to pay one-quarter in specie and three-quarters in the nearly worthless State notes.

The company at first created only a ripple. Law extended its scope to take in all the other concerns which had been chartered to exploit foreign parts until

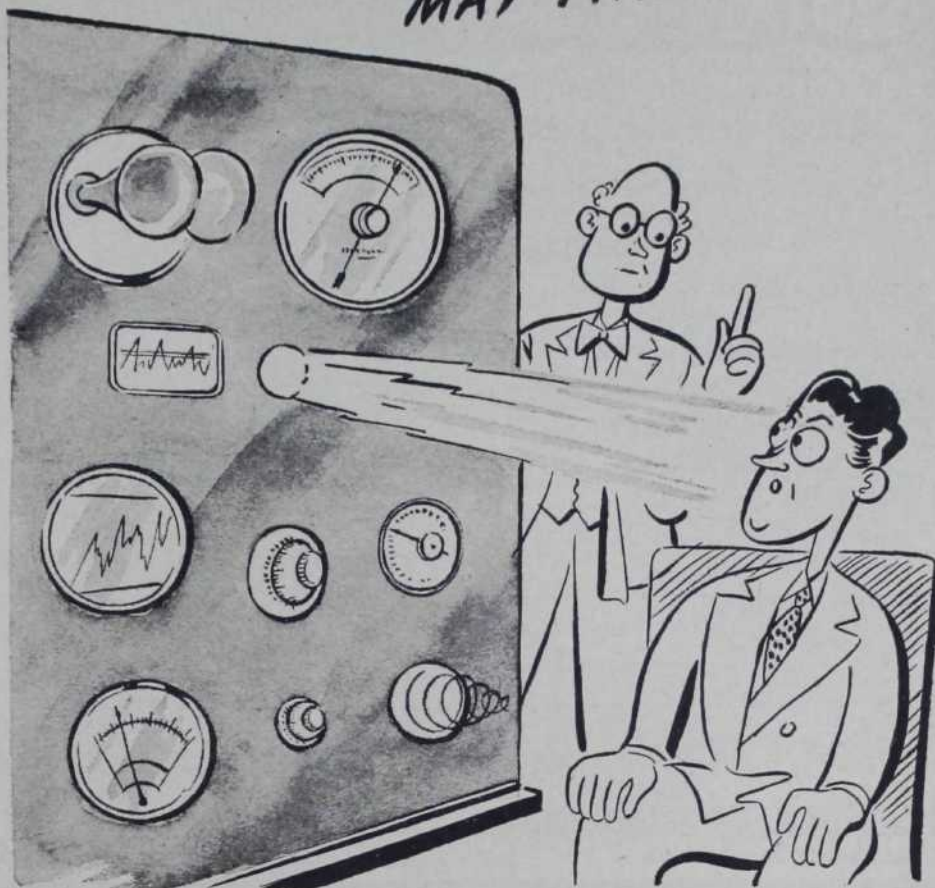


Broken, he spent his last days in Venice

eventually, under the name of the Indian Company, it had a monopoly of the French foreign trade. In the meantime, to gain certain domestic privileges for the company in the way of collecting taxes, Law permitted his bank to become a royal bank.

In December, 1718, the capital was returned to the stockholders and the bank became a national institution. That was the beginning of the end, because, although Law was supposedly in supreme control, the Regent forced him into a note issue of 1,000,000,000 livres,

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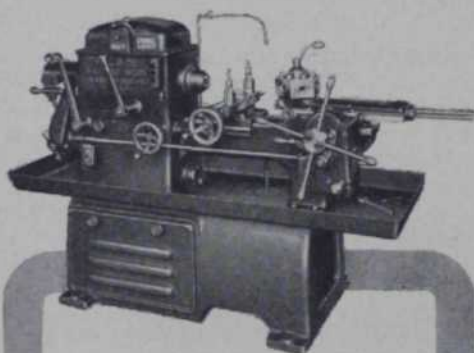
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whereas the private bank had never had more than 60,000,000 livres out. Law was forced to become the kind of banker he had declared ought to be hanged.

The public neither knew nor cared what was going on. The new money bought things and it commanded a substantial premium over specie. The shares of the company soon were selling at double their issue price.

Law became, in name as well as in fact, the directing head of all French finance. He then proceeded to carry out his plan of converting the whole national debt into shares of the company. We need not go into details. The operation required an immense issue of company stock, the taking over of great amounts of this stock by the bank as collateral and the issue of huge amounts of bills. The speculation which had been gradually gaining pace developed into a frenzy. Shares with a par value of 500 francs changed hands at from 10,000 to 18,000 francs.

Playing the market

IN THE Rue Quincampoix, the brokers regimented themselves and, at a given signal, a group would all sell, depressing the price, and at another signal they would buy, raising the price.

The market value of the stock rose to more than 10,000,000,000 francs, although the company's known revenues did not exceed 80,000,000.

Slowly some other wiser speculators began to realize on their shares and put the proceeds into land. Others converted their notes into gold. Law countered by announcing that, at a certain date, gold would be devalued. This brought in a wave of gold to take advantage of the clause in the bank's notes.

The bank and the company had remained separate institutions. But gradually the public began to be suspicious of the bank, as well as of the company.

Law, who knew exactly what could be done and likely knew also exactly what could not be done, resorted to every one of the expedients which have since been used to bolster worthless securities or worthless money. He forced decrees making the holding of gold illegal, prohibiting use of silver in payments involving more than 300 francs. Hoping to force the use of bank notes, he put in a form of rationing which prohibited use of silver or gold for the purchase of many articles.

But there was no staying the end. In November, 1720, just one year after having reached its highest point, the whole Law system folded and Law, who had for some time been hiding in the Palais Royal, fled to Brussels taking with him only 800 louis of the millions he had brought into the country.

John Law died broken in purse and in spirit, in the Venice where he had cut so fine a figure, certain in the knowledge that, if only his hand had not been forced, he could have rescued France. He alone knew that real value cannot be created and sustained by legerdemain.

But, driven to try the impossible, he could not make it work. No one has since been able to make it work either.

Washington War Survey

From the Records of the U. S.
Chamber's War Service Division

War Requirements—WPB Vice Chairman reports country will have to produce \$80,000,000,000 worth of war materials to meet 1944 military commitments; 1943 production totaled \$34,000,000,000 • Present Army schedule calls for twice as many men overseas in December, 1944, as in December, 1943, reports Army Service Forces.

★ ★ ★

Subcontracting—Recent survey made by Smaller War Plants Corporation discloses that 354 prime contractors, with contracts totaling \$16,076,000,000, placed subcontracts amounting to \$3,831,000,000 with 105,010 companies.

★ ★ ★

Civilian Allotments—War Food Administration reports availability of sufficient quantities of fats and oils to permit 28 per cent increase in soap production for civilian use • WPB announces release for essential civilian consumption of approximately 600,000 yards of parachute nylon cloth rejects.

★ ★ ★

Scrap and Salvage—WPB reports that up to September 15, more than 49,000,000 pairs of worn silk and nylon hosiery, weighing more than 2,454,584 pounds, have been contributed to war program • WPB calls for greatly intensified drive to provide 400,000,000 used tin cans monthly for war production.

★ ★ ★

Federal Licenses for Dealers—Every person or concern selling commodities or services under price control required to have license under OPA Licensing Order No. 1, beginning October 1.

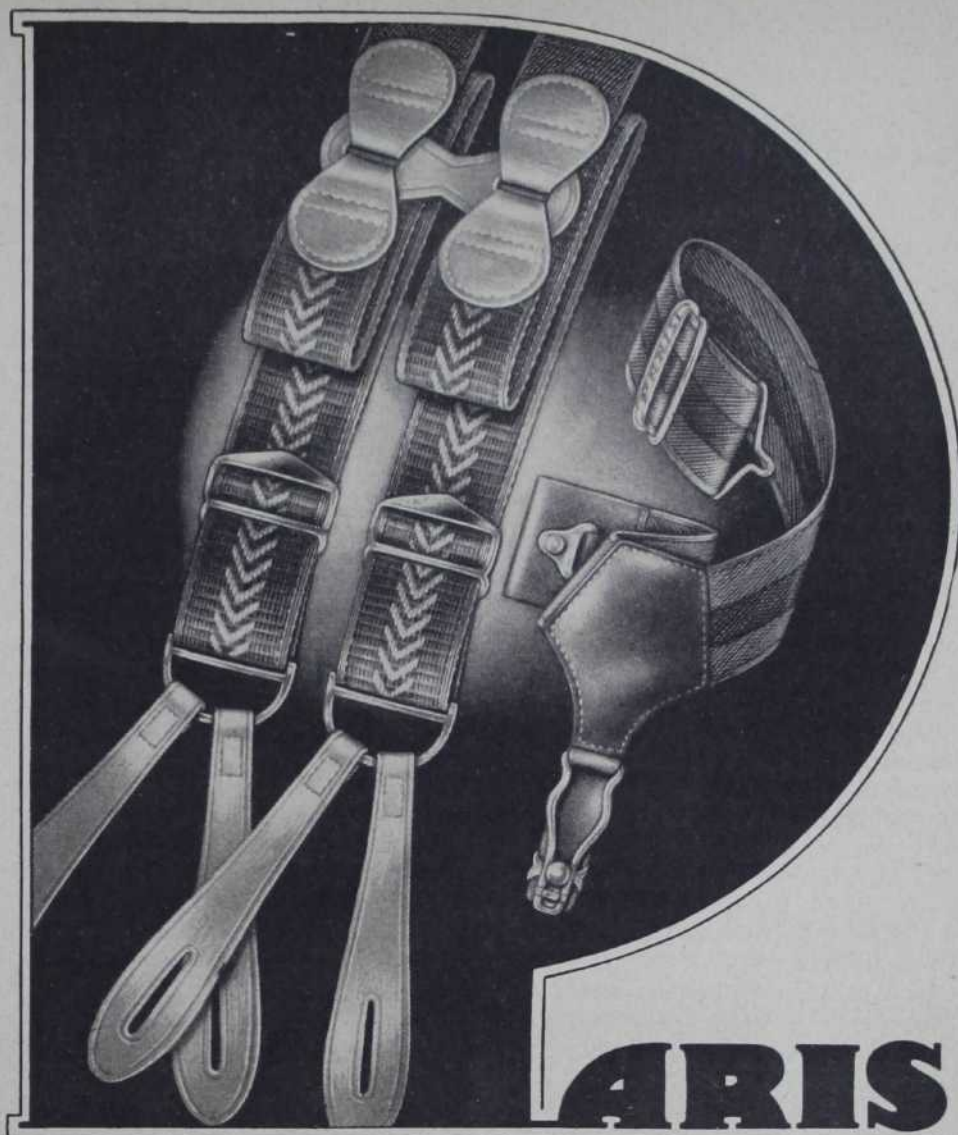
★ ★ ★

Lend-Lease Food Shipments—Lend-Lease Administration reports exports of food to allies during first eight months of 1943 on overall basis amounted to approximately 9 per cent of total food supply, in terms of dollar value; 1942 exports totaled 6 per cent of available supply.

★ ★ ★

Navy Market Offices—Navy establishes 12 market offices for procurement of perishable foods in South Boston, Mass., New York City, Baltimore, Md., Jacksonville and Miami, Fla., New Orleans, La., Fort Worth, Tex., Chicago, Ill., Los Angeles and San Francisco, Calif., Seattle and Spokane, Wash.

—E. L. BACHER



The Support of a Nation

You help the war effort when you buy only what you need when you need it—by taking care of what you buy to prolong its life. ★ ★ ★ *And this is equally important: Don't let anyone deprive you of your American right to choose the dependable brands you prefer. Trust the Trade Marks which have stood the test of time.*

PARIS Garters and Suspenders last longer, wear better, give you greater satisfaction. Invest the money you save in more War Bonds and Stamps. ★ ★ ★ Illustrated—PARIS "Free-Swing" Suspenders, "Can't Skid Off Your Shoulders," \$1. Others \$1 and \$1.50. PARIS Garters, "No Metal Can Touch You," 55c. Others 55c and \$1.

PARIS GARTERS—"FREE-SWING" SUSPENDERS

Conquer Want by Plenty

GOVERNMENT should govern, not manage, says Dr. Henry M. Wriston, to the end that real wealth may flow to the "common man" from the well-springs of unrestricted production

A WASHINGTON newspaper man who makes a professional practice of letting his curiosity get the better of him was chagrined recently to discover, while studying the latest roster of federal agencies, that he had never heard of many agencies therein listed.

Selecting a number of titles unfamiliar to him, he telephoned several friends in Congress for aid in identifying the agencies. His hunch was correct; the congressmen, whose votes had directly or indirectly helped create these government establishments, were approximately as mystified as he was.

Some of the new agencies and activities of our "managed economy" remind Dr. Henry M. Wriston, president of Brown University, of the Queen's comment to Alice in "Through the Looking Glass." It takes practice, said the Queen, to be able to "believe as many as six impossible things before breakfast." The way to achieve this feat, added the Queen, is to "draw a long breath, and shut your eyes."

Curious aggregation

ALL who imagine that a managed economy is synonymous with order and efficiency are invited by Dr. Wriston to examine, for example, the curious aggregation of government corporations which have sprung up in recent years. They help to show, Dr. Wriston writes in his new book, "Challenge to Freedom," published by Harper & Brothers, what happens when alert citizenship abdicates in favor of administrative technique.

Twenty-two "Government Corporations and Credit Agencies" of the United States are specifically listed in the Treasury's daily statement, he points out. Several of these have subsidiaries. Many others are unnamed. Some are secret. Some were created to serve a war purpose, but it is impossible to draw the line between these and others with no war function. In ten years, government corporations

have increased their assets from \$4,000,000,000 to \$23,000,000,000.

Thirty-two of these corporations and agencies render no accounts to the General Accounting Office. Nine others render only partial accounts. Pre-audit has been discontinued in many cases "because of the war emergency." Several publish no reports at all. In all, these corporations alone conduct operations much larger than the entire cost of government ten years ago, with no check upon them by Congress or the public.

"Many created for 'emergency' purposes acquired permanence by a kind of adverse possession," writes Dr. Wriston. "Others have lived the life of a chameleon, performing different functions at different times for different objectives. Some are chartered in perpetuity and have no charter limits upon their borrowing capacity. They are an unmapped, and partially unexplored, continent in the governmental world. The vast confusion arises from government doing haphazardly and to excess what has heretofore been done in moderation and with care."

The only available chart of the government corporation structure is "so complex that it is difficult to understand at all." The agencies change so fast that any description is likely to be obsolete before it can be delineated.

"These corporations give us a perfectly clear picture of what to expect from governmental economic planning. They are its evident fruit. Created by executive action, controlled by that modern slogan, 'administrative management,' dedicated, as they are, to the 'newer' functions and the social purposes of government, they reflect the methods and ideals of unrestricted operation. They offer the finest possible example of how government would organize business, if given the opportunity. Yet they mirror the bitterly criticized defects of private enterprise.

"Moreover, they represent a pattern so haphazard and helter-skelter,

methods so diverse, functions so ill-defined, efforts so overlapping as to provide a model for confusion.

"Before government takes over the whole economy, it might well do a little planning among the planners. There is a desperate need for reform in the citadel of the reformers."

Dr. Wriston carries the reader of "Challenge to Freedom" through the looking glass to many other remarkable areas of our "managed economy." His approach is scholarly and restrained, and he reserves his indignation for those of whatever political affiliation or ideological persuasion, who have lost faith in democratic institutions.

Banish privilege

THERE are those, he points out, who seek to convince the citizen that his choice lies between "*laissez-faire*" and a system in which the government manages everything for everybody. No such dilemma exists, says Dr. Wriston; there is another alternative, which is simply to bring the American system of government back into balance. Let government govern, but not manage.

"Accept boldly the dangerous doctrine of freedom, and repel every suggestion that safety is more important. Stop the alternate coddling and sacrifice of youth; open to them the avenues of opportunity and adventure. Eschew privilege, banish privilege, accepting for yourselves and offering to others success or failure as talents and industry warrant . . . Conquer poverty by the only credible method, by production upon a basis so efficient, upon a range so vast, upon a scale so magnificent that the real wealth of the world flows to the common man."

Dr. Wriston addresses an especial appeal to business men. Freedom—freedom for others—is among other things good business, he emphasizes.

"Business need not pretend an interest in the man in the street. Its interest is profoundly real; it cannot be otherwise. If freedom spreads, markets will spread, and, unless freedom spreads, markets will be more and more restricted. As long as there is no trick by which business can expand a market among slaves, so also there is no way to prevent a market among free men." Political action, Dr. Wriston adds, can cut off silk, but it cannot create nylon.



ON THE WARPATH!

EVERY U.S. HIGHWAY—every country road—has been converted into a warpath by trucks.

Fast, dependable trucks bring more than half of America's vast food supply to market—to feed America's workers and fighters.

A recent survey of hundreds of war plants shows that nearly two-thirds of their freight arrives and leaves by truck.

More than fifty thousand American communities depend entirely on trucks and highway maintenance to get their goods in and out. They have no other transportation.

A good share of the trucks which keep America's warpaths alive with essential traffic are Internationals. Performance made them the

largest selling heavy-duty trucks on the market. And the same toughness, dependability and economy of operation that put them out in front in days of peace keep them there in these days of war.

It's a big job trucks are doing—a job that *must* be done. That means your trucks must be maintained, must be kept in tip-top shape. International civilian truck service—the nation's largest company-owned truck service organization—is now a *wartime* truck service . . . more alert, more efficient than ever.

No matter what your make or model of truck, let International Service keep your trucks rolling on the warpath for Victory!

NEW ENGINES

The government has authorized the manufacture of a limited quantity of International KR-11 Heavy-Duty Trucks, for civilian hauling in essential occupations. These big new trucks will have *brand-new* 450-cubic-inch engines, proved in International Half-Track military vehicles!

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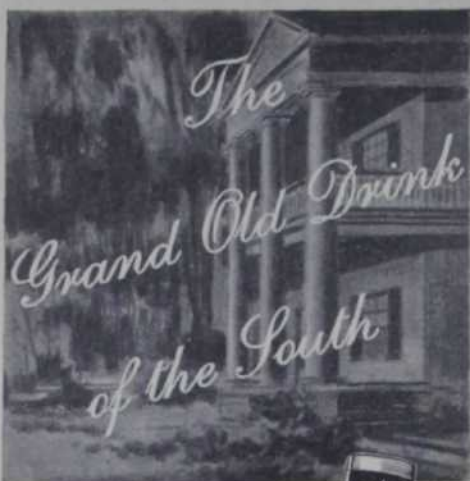


The International KR-11 Heavy-Duty Truck, a big brute for big jobs, soon available for essential civilian use.



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... or What Have You?

By JULIETTA K. ARTHUR

SWAP SHOPS are springing up all over the country, as a result of shortages of consumer goods.

Two things have stimulated the growth of the barter system: the ingenuity of retailers in getting used articles to fill their shelves; and the preference of many customers for used items of standard make rather than for new products of "victory construction."

New electrical appliances for kitchen and laundry have entirely disappeared from the market in some sections, but utility companies are remedying the situation by bringing buyer and seller together on an exchange basis—and, incidentally, keeping dealers from going out of business.

The Utah Power and Light Company, in its advertising, refers to the local electrical shops as "Trading Posts." Through advertisements in newspapers in more than 50 towns, it urges everyone who desires to buy, sell or trade a toaster, vacuum cleaner or other electric appliance to list his wants with his local dealer, free. Before used articles are sold or traded, the dealers recondition them.

In Pittsburgh, the Duquesne Light Company has been promoting a "Swap-Your-Old-Appliance-for-War-Stamps" campaign. Under this plan, which has the Treasury Department's approval, the Company's 272 dealers buy used and out-of-date appliances and pay for them in War Stamps. Articles beyond repair are dismantled for needed replacement parts.

The Philadelphia Electrical Association has found another way to get repair parts. For old switches, springs, handles, thumb rests and other parts, it pays ten cents a pound.

In Birmingham, the first electric appliance to disappear from the market was the electric iron. Ernest Abernathy, president of the Abernathy Furniture Company, was formerly in the appliance business and had some

ideas. Over the air, through the papers and on billboards, he appealed to housewives who had electric irons which they no longer needed, to bring them to his store and sell them for cash.

In this way, he obtained 4,000 irons for his customers. Then he hired girls to go from door to door in their spare time, seeking baby carriages, bed springs, refrigerators, sewing machines and other scarce articles.

Builds good will

CUSTOMERS may trade in their used or out-of-order items for reconditioned ones, repaired in Mr. Abernathy's own shop which employs chiefly older men. Mr. Abernathy's business has increased in volume 33 1/3 per cent over last year—and he is building good will for future use.

In Terre Haute, the Root Dry Goods Company offers "budget checks" for any hard goods a customer may bring in to trade. The budget checks can be spent in any department of the store just as if they were cash. The "trade-ins" are reconditioned before they are offered for sale.

In New York City, Bloomingdale's department store has broken the ice by advertising that it wants—and needs—vacuum cleaners of any kind, in any condition. Within three days after the first ad appeared, the store had 300 inquiries.

New York's most widely known swap shop, maintained on the Lower East Side under Civilian Defense Volunteer Offices auspices, is modeled after the swap shops which flourish in Britain.

Whatever a customer brings in of value, a coat, dress or even a toy boat, is appraised and the customer given a sales slip which he can spend immediately for merchandise, or hold until he can increase his credit by bringing in something else.

The shoe rationing division of OPA

has sent representatives to study this store with a view to organizing similar shops throughout the country.

OPA's interest was stimulated by the flood of "swap centers" set up by mothers, from coast to coast, to handle children's shoes. On the fact—not the theory—that boys' and girls' shoes wear out faster than shoe stamps materialize, OPA is taking a paternal interest in these voluntary neighborhood second-hand stores.

As a result, shoe swap centers are now being tied in with local school programs. Georgia was the first state to approve the idea through its Congress of Parents and Teachers.

The swap-it idea has also invaded the manufacturing field. Jack Lobell, for example, has formed the "Ocean Pearl Button Exchange." He figures that since new stocks of pearl buttons will not be available until the Japs are cleaned out of the Pacific, he can at least keep his business intact by dealing in old ones.

Mr. Lobell invites manufactures to submit samples of button stocks they no longer need. These samples are circulated to the trade and, when a manufacturer sees some he wants, he swaps other buttons for them. If there are no immediate takers, Mr. Lobell buys the buttons for stock.



Why **NATIONALLY KNOWN MANUFACTURERS** *Chose Tennessee!*

An Important Message to Manufacturers

From **PRENTICE COOPER**
GOVERNOR OF TENNESSEE

Successful manufacturers do not locate plants by chance. Locations are decided only after exhaustive research. Below is a partial list of nationally known manufacturers who have followed their investigation of Tennessee's industrial advantages with the investment of millions of dollars:

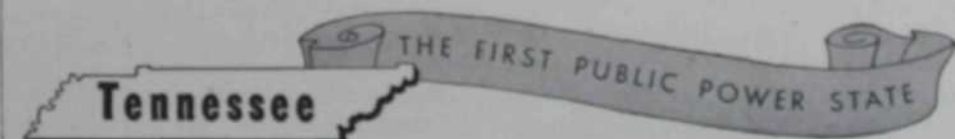
Aluminum Company of America	International Harvester Co.
American Zinc, Lead & Smelting Co.	International Shoe Co.
American Cyanamid & Chemical Corp.	International Minerals & Chemical Corp.
Armour and Company	Kingsport Press, Inc.
American Bemberg Rayon Corp.	Kraft Cheese Corp.
Bemis Bros. Bag Co.	Knox Porcelain Corp.
Blue Ridge Glass Co.	Layne & Bowler, Inc.
(Corning Glass Works)	Monsanto Chemical Co.
Continental Can Co.	National Carbon Co.
Combustion Engineering Co., Inc.	Pennsylvania-Dixie Cement Corp.
Crane Company	Proctor & Gamble Co.
Cudahy Packing Co.	Stokely Brothers & Co.
du Pont de Nemours, E. I. & Co.	Swift & Co.
Firestone Tire & Rubber Co.	Tennessee Eastman Corp.
General Motors Corp. (Fisher Body Div.)	(Eastman Kodak Co.)
General Shoe Corp.	Tennessee Copper Co.
Glidden, The Co.	United States Pipe & Foundry Co.
Goodrich, The B. F., Co.	Victor Chemical Works
	Consolidated Vultee Aircraft Corp.

One or more of these industrial advantages influenced their choice of Tennessee:

- ☆ An unsurpassed variety of industrial minerals and basic materials;
- ☆ Low-cost TVA hydro-electric power (18 billion kwh annual capacity);
- ☆ Huge coal-producing area for possible economical steam-power generation;
- ☆ Inexhaustible supply of industrially suitable water;
- ☆ Excellent railway, highway and air transportation facilities, plus economical river transportation to Midwest, Gulf, and South American ports;
- ☆ Ample State vocational-trained labor for every industrial requirement;
- ☆ Central location: more than 51% of the Nation's population is within a 500-mile radius;
- ☆ Opportunity for low-cost assemblage of raw materials from any point in South—a region with the greatest aggregate mineral production.
- ☆ Choice plant sites free of labor competition, congestion and traffic problems.

These and other advantages also may be to your profit too. For specific information and surveys on your requirements, write

Governor's Industrial Council, Department of Conservation
611 State Office Bldg. Nashville, (3) Tenn.



Identification

A unique method of identifying employees who work in war plants has been worked out by Sun-Kraft, Inc., Chicago. Each employee has one of his hands marked with a secret, non-injurious, semi-permanent, invisible chemical ink.

If, when entering the plant, a worker has lost his identification badge, he places his hand through an opening in a black curtain and under an ultra-violet ray machine, and the chemical ink glows. The symbol can be removed with other chemical inks, also secret.

"Pie" from Distant Ports

By GERTRUDE ORR

A WAR correspondent in Sicily, who asked two American soldiers about homecoming plans, found himself listening to a wistful discussion of the relative merits of apple and blueberry pie. Pie, to those two doughboys, is a symbol of the American way of living.

Both the business man and the housewife of the past year, shopping hurriedly after long hours of war work, frequently encountered bare shelves. Those gaps are beginning to fill up and innumerable items, long missing, are reappearing. They are harbingers of "pie" for business men and home-makers, alike; the first results of a gradual re-conversion of industry to peacetime needs and of a growing tonnage of imports from reoccupied territories and reopened ports of Europe, Africa and the East.

Our ships transporting men and supplies, both for military forces and civilian populations, which have been stripped, looted or blockaded by the Axis, are not returning empty. Jostling strategic raw materials to keep war production rolling are wines from North Africa, brandies and anchovies for hors d'oeuvres from Portugal.

Spain is sending quantities of capers in brine, used in sauces that transform fish entrees into a gourmet's delight; olive oil and stuffed olives; paprika, sage and thyme; filbert nuts for confectionery; and imitation pearls for costume jewelry. More important is the volume of cork and cork stoppers.

Fine furs and attar of roses, for perfumes and cosmetics, are coming from Turkey; coconut oil from Ceylon; cinnamon, chutney, ginger and sandalwood oil from India; locust beans and gum from Cyprus; copra and mother of pearl from Tahiti. Even leopard skins are showing their spots

among the goat and kid skins from South Africa to lend dash to the coat and glove stocks for feminine wardrobes. Such items increase in number on ships' manifests as the Allied forces move forward and we advance toward an impressive all-time high of 20,000,000,000 in American shipping tonnage.

More soap and candy

IT MIGHT not seem important that coconut oil is again beginning to reach this country from Ceylon. Yet its lack affected every man, woman and child who uses soap or buys a five-cent candy bar. Practically all our coconut oil, which is made from copra, came from the Philippine Islands before Pearl Harbor. Some 300,000,000 pounds were imported in 1940. Not only were supplies cut off overnight but the military bought up the reserves. Result: the customary

drugstore array of tempting tidbits disappeared and soap and soap flakes began to disappear. The fats and oils which go into them had become strategic war material. The delicately scented varieties became especially scarce but they are coming back with increasing imports of sandalwood oil from India and thyme oil from Spain. So are cosmetics and perfumes. Turkey is sending us rose oil, produced in the Anatolia region of Asia Minor. Bulgaria formerly was the chief exporter of this oil which is used both in soaps and cosmetics.

Many of the native industries overseas, which have catered to the American way of living, have been maintained, at least in skeleton form, throughout lean war days. There is a jealous eye on postwar markets and the voluminous war savings in this country.

It has been estimated that our consumer goods purchases will total more than \$20,000,000,000 in the first six months after war—provided they are available—and the merchants of every land hope to get their share of that revenue. Even France, despite German occupation, has continued its famous perfume industry to some extent. Shortage of alcohol, containers and wrapping materials, along with transportation difficulties, have been major problems.

Spain, which had its baptism of blood in its own civil war, has maintained a precarious neutrality in the world conflict and her trade has forged ahead. The weakening of Axis prestige is turning the flow of her commerce and that of Portugal to the West. Wholesale houses are getting Spanish sherry, olives and olive oil, and the brandies and anchovies of Portugal. Madeira wines, embroideries and basketwork are reappearing



AS ALLIED armies reopen ports long held captive by the Nazis, the effect is already evident on the dinner table

YOURS for the asking



THE impressive production records now being achieved in the Central West and Southwest promise new and richer opportunities there for business and industry when the war is over.

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We'd welcome an opportunity to make a special, confidential study, designed to fit your particular problems and needs. Your inquiry will receive prompt attention. Write or wire —

J. G. CARLISLE

Director

Industrial Development
1710 Missouri Pacific Bldg.
St. Louis (3), Mo.



and even the Canary Islands are sending a few bananas and onions.

Of all the countries along the Mediterranean, Egypt has best maintained its trade with this country during the war. To our imports of raw cotton, rags and cottonseed oil, thousands of pounds of henna are being added. This is a strategic material only for beauty parlors. Its scarcity forced many redheads to change their color scheme but soon they can flame again.

The reoccupation of French North Africa had its first effect on the Sicilian campaign. Since 1939 the cultivation of wheat, legumes and fresh vegetables has been encouraged for the ostensible purpose of supplying France. Few of these needed foodstuffs reached the hungry French population after the armistice, however, but moved on into Germany. War needs also stimulated the growing of oil seeds and increased herds of sheep, goats and cattle. Ironically enough this Nazi policy backfired, this summer, when surpluses greatly assisted the Allied campaign which opened the backdoor of Italy.

Lentils, flax and hemp

ALGERIA, Morocco and Tunisia have been rehabilitated with surprising speed because of their extensive production of cereals which range from wheat, barley, maize and sorghum to beans, lentils, flax and hemp. The Berbers of Morocco also are orchard growers who have long cultivated olive, fig, orange, pomegranate and almond trees. With the German heel off her neck, Morocco can once more export her specialties of snails, canary seeds for warblers, goat and kid skins and sausage cases. Algeria will add dates and wines, and Tunisia, palm fibers.

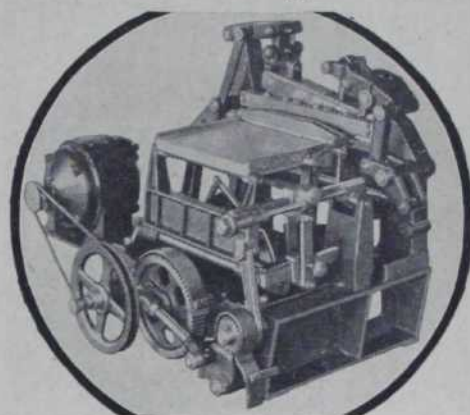
Italy will be much more of a problem child to rehabilitate. Even in normal years, Italy imported a great deal of wheat, preferably of the hard variety grown in southern Europe from which macaroni and spaghetti are made. Meat, eggs and coffee also were imported but there was a surplus of fresh fruits and vegetables, olive oil and cheeses. The drainage of manpower and the destruction of industrial centers have wrought havoc which will take considerable time to repair.

One of these days the highly fragrant cheeses which are favorites with epicures will be back on the local markets. We used to get at least half of the Italian cheeses exported, about \$6,000,000 worth. More important are the raw silk, hat felts, marbles, alabasters, and rayon fibers which used to come into our ports.

The Allied Military Government already has made long strides in restoring order in Sicily, which has extensive vineyards and groves of olives, oranges and lemons. The Marsala wine for which the island is famous and almonds and hazel nuts from the inland woods will soon be coming this way.

These first steps back to our customary way of life and toward the reconstruction of world trade are a healthy portent for happier days when there will be a slice of "pie" for everyone.

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PRODUCTS MADE OF FABRICS

"We Will, You Bet We Will"

WHEN THE WAR IS OVER," the Army sings, "we will wash the sergeant's shirt.—We will—like hell we will." (Tune: "Battle Hymn of the Republic.")

Meanwhile, civilians are singing, too:

"When the war is over, we'll have jobs for everyone—"

Beyond that point the lyric is not clear. Those who sing the first line loudest frequently are reduced to humming the refrain. The reason is pretty obvious:

Any kind of postwar planning which predicates its success on universal employment must be based on accurate knowledge as to how many people want jobs and how many jobs are available.

Without that kind of research even the loudest singing peters out:

"When the war is over, we'll have jobs for everyone—de da, de de, dum dum!"

Not so in Albert Lea, Minn.

That farming and industrial community on the edge of the Corn Belt believes that promises should be made with some conception of what performance may entail.

Citizens there agreed that "somehow there should be a job paying a living wage for every worker who wants one after the war." They were agreed, too, that, if this goal could be achieved, the other problems of the postwar period could be solved more easily. A high level of employment would mean a high level of demand for the goods that business would have to offer.

In June the Albert Lea-Freeborn County Postwar Planning Committee was set up with C. E. Myers, district manager of the Interstate Power Company, as Chairman and some 50 community leaders as members.

Full cooperation

HELPING them was the Northwest Research Committee, a volunteer group made up of representatives of the Committee for Economic Development, the United States Chamber of Commerce, the University of Minnesota and the Minneapolis *Star Journal* and *Tribune*.

They started with 1940. In that year, 4,266 persons in Albert Lea had jobs and 721 were unemployed. Thus the total potential prewar labor force was 4,987.

But the war has changed all that.

Some Albert Lea citizens have gone elsewhere to take war jobs. People from farms have come to Albert Lea looking for jobs. Some workers are in the armed services—some children have grown into the working age limits, some veterans have grown out of it. Still today's picture was easy to get—with patience. All that was necessary was to ask employers how many workers they were now using. The answer was 5,455. Two hundred more potential workers were not working. Present job need was 5,655.

Future hard to see

THE future picture is harder. People who have moved away may return when war jobs end; soldiers will return. On the other hand, some farmers may return to the farm, women and old people now working may quit; young workers may return to school. Expertly balanced, all these probabilities indicated that, after the war, Albert Lea might have 1106 more people looking for jobs than are working now. Hence, come peace, Albert Lea will need 6,561 jobs.

The next task was to find out how many jobs Albert Lea employers thought they would be able to provide. To get that information, every employer, from the largest individual plant to the operator of the smallest shop was asked to estimate how many workers he would be able to employ after the war.

These estimates had to be based on something more definite than wishful thinking or the reading of tea leaves. Business men and technical experts from the committee gave some time to the effort to be accurate. For instance, Albert Lea has 11 major industries. These were surveyed first. Studies showed that, in 1940, the 11 companies had a business volume of \$22,795,000. This year the volume is running at \$51,443,000. Calculations show expectations for a postwar volume of \$49,660,000.

Using these predictions and activities as a guide, the city's 442 secondary businesses also calculated their postwar employment needs. When the figures were in, they showed that Albert Lea can expect to employ some 5,968 workers when peace comes. That is 593 below the estimated number of job seekers.

There, then, is Albert Lea's postwar employment problem. While the disease was being isolated, a cure was

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being sought. Coincident with the job survey, Victory Aides were interviewing a cross section of the city's population to find out what goods they intended to buy after the war. Farmers were asked to give the same information by mail. Figures were obtained for purchases, ranging from automobiles, for which city and town expects to spend some \$2,300,000 after the war, to alarm clocks.

The back log of desire is tremendous — \$1,798,056 for city home construction; \$105,298 for refrigerators; \$115,022 for furniture; \$263,250 for farm electric improvements.

Master guidelines

TOTAL of postwar buying expectations reach \$12,374,900—perfectly possible in the light of figures compiled by another committee which, studying the town and county's financial position, found liquid assets of \$16,298,000, excluding listed stocks and bonds, against a rapidly decreasing total indebtedness.

Still another survey showed that city and county maintenance work, deferred because of war, could reasonably reach \$400,000 and provide some 3,568 man-days of employment.

These facts serve as the "master guide lines" to the solution of Albert Lea's problem. With them, the city believes it will be possible to find jobs for the potential 593 unemployed after the war.

In the last analysis, this is a task that only the employers of Albert Lea will be able to do. But, with the information the planning committee has obtained from these surveys and interviews, it now will be able to go to each employer and determine whether his estimate of the number of men he will be able to employ after the war was really accurate.

Perhaps Joe Doakes, a furniture dealer, did not think farm income would be as high as the survey shows it will be or that 2,154 families in Albert Lea and Freeborn county will be buying furniture in the first two years after the war. If he learns these facts, perhaps he will revise his estimate of the amount of furniture he will be able to sell and decide he will need one more salesman than he estimated originally.

Or, perhaps, Bob Blank, a filling station operator, did not realize the people of Albert Lea and Freeborn county expect to buy 2,296 new automobiles during the first two years after the war. He may decide he will need another mechanic to handle the increased business he will be doing.

Thus, each employer will be "chipping away" at the total of potential unemployed. A new job may be found for one man here, another there, three more there and 15 more there. . . .

Whether the total is whittled down to zero will depend entirely upon the co-operation of each individual employer.

This job remains to be done but Albert Lea is working on it in a way that suggests a hopeful refrain for the spot where others are still singing dum de dum:

"We will, you bet we will!"

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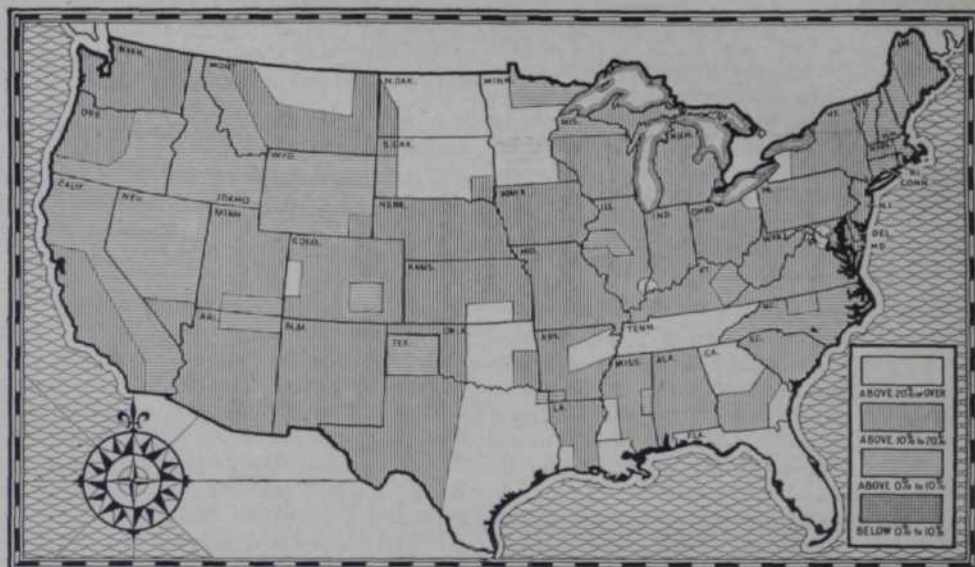


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The Map of the Nation's Business

By FRANK GREENE



PACED by favorable war news, industrial production in September continued at top speed despite growing manpower difficulties. Aircraft factories produced close to 8,000 planes with the trend toward heavier types, while unprecedented demands for steel pushed industry operations to slightly more than 100 per cent of rated capacity.

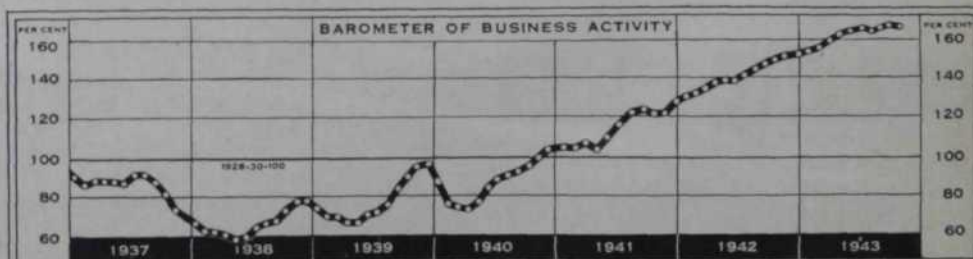
Ship construction totaled 160, only four less than in August. Output of electric energy struck a new all-time high, bituminous coal production went slightly above last year, and freight carloadings reached a seasonal fall peak. Gross rail revenues continued to expand but net income remained below 1942 levels.

Crude oil output set a new record with demands still unsatisfied. Heavy engineering awards continued sharply under a year ago, particularly public construction.

More shading in this month's Map reflects slight gains as compared with corresponding period of last year



Retail trade improved with cooler weather. Stock prices advanced irregularly in heaviest September trading since 1939. Rising grain prices caused a gradual uptrend in commodity averages.



Although still below projected schedules, output of munitions and other war goods held up well in September despite increasing labor shortage

NATION'S BUSINESS for November, 1943

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